# PeopleSoft.

EnterpriseOne Xe System Administration PeopleBook

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# **Table of Contents**

Overview to System Administration 1–1
Understanding OneWorld Roles
CNC Consultant and CNC Administrator 1–3
Custom Solution Consultant and Application Developers 1–3
Application Consultants and Application Project Leaders 1–3
Hardware, Network, and Third-Party Software Consultants and
Administrators
Understanding The System Administration Guide 1–4
Middleware
Middleware
Understanding JDENet Communication Middleware
JDENet Communication Middleware 2-3
Socket-Based Communication 2-4
Message-Based Communication 2–4
OneWorld Process-Based Design 2–5
Network Processes 2–5
Kernel Processes
OneWorld Dedicated Process Design 2-6
jde.ini Settings 2–7
JDENET_n Settings 2–7
JDENET_k Settings 2–8
Purpose of [JDENET] jde.ini Settings
Purpose of [JDENET_KERNEL_DEFx] jde.ini Settings 2–11
JDENet Middleware Process Flow 2–12
Load Balancing Design 2-16
Load Balancing among NET Processes
Load Balancing across NET/KERNEL Jobs 2–17
Server Administration Workbench (SAW) 2–18
Understanding JDEBASE Database Middleware 2–21
JDEBASE Database Middleware Flow 2–21
Data Replication
Understanding Data Replication
Concepts of Data Replication
What is a Published Table and a Publisher Machine?
What is a Replicated Table and a Subscriber Machine? 3-5
What is the Data Replication Change Log?
What is the Data Replication Pending Change Notifications Table?
3–6
What is the In-Synch Flag?
What is Forced Synchronization?
What is the Enable/Disable Flag? 3-7

Caching Replication Information	3-8
Planning a Replication Strategy	3-8
Tables Suitable for Replication	3-9
Tables Unsuitable for Replication	3-13
Understanding Pull Replication	3-14
Understanding Just-In-Time Replication	3-16
Understanding Push Replication	3-19
Push Replication for Database-Only Workgroup Servers	3-21
Third-Party Replication	3-22
	3-24
	3-25
Selective Replication Using Table Conversion	3-26
Setting Up Data Replication	3-27
Working with Publishers	3-28
Working with Subscribers	3-31
Adding a Subscriber	3-31
Synchronizing and Unsynchronizing Subscribers	3-34
Deleting Subscribers	3-36
Enabling and Disabling Publishers and Subscribers	3-37
Creating Publishers and Subscribers Using a Batch Process	3-39
Copying a Publisher and its Associated Subscribers	3-41
Setting Up the Environment for Data Replication	3-42
Setting Up a One-Tier Replication Environment	3-42
Setting Up Publisher and Subscriber Records	3-44
Setting Up a Two-Tier Replication Environment	3-45
Setting Up Replication to a Non-OneWorld Workgroup Server	3-50
Setting Up Two-Tier Replication with Different Platforms	3-53
Setting up Forced Synchronization	
Viewing the Replication Logs	
Viewing Outstanding Changes for a Given Host	
Viewing Publisher Changes that the Pending Change Log Did No	
Receive	
Viewing Pull Subscribers Who Have Not Retrieved Their Changes	3
3-63	
Replicating Data Dictionary Changes	
Understanding Data Dictionary Replication	
Default Just-In-Time-Replication for Additions Only	3–66
Just-In-Time-Replication (JITR) for Change and Delete	3–66
Data Dictionary Replication Flow for a Workgroup Server Configu	ıration
3–67	
Replicating Data Dictionary Tables on a Workgroup Server	3–67
Replicating Data Dictionary TAM Specifications on Logic Servers	3-69
Setting Up Data Dictionary Replication	3-70
Copying Data Dictionary Files to a Server Using TAMFTP.exe	3-72
Processing Options: R92TAM	3-75
Data Dictionary Administration	1 1
Data Dictionary Administration	<b>4–1</b>
Replicating Data Dictionary Changes to Workstations	
Concepts of Replicating Data Dictionary Changes to Workstations	
4_5	

Setting Up Data Dictionary Replication on the Workstation	4-5
Replicating Data Dictionary Changes to Servers	4-7
Replicating Only the Changed Items	4-8
Refreshing the Data Dictionary	4-9
Troubleshooting the Data Dictionary	4-10
Synchronizing WorldSoftware and OneWorld Data Dictionaries	4-11
Updating Display Decimals	4-13
Object Management Workbench Configuration	5–1
Object Management Workbench Overview	5-3
Projects	5-3
Default Projects	5-3
Moving Objects from the Default Project to an Existing Project .	5-4
Using the Default Project for Object Research and Development	5-4
Object Librarian and Non-Object Librarian Objects	5-4
Using the Default Project to Manage Non-Object Librarian Object	ts
5–5	
User Roles	5-5
Allowed Actions	5-5
Tokens	5-6
Understanding Object Management Workbench Configuration	5-9
Configuration Options	5-9
Configuration Process Flow	5-10
Activity Rules	5-12
Allowed Actions	5-12
Project and Object Logging	5-12
Project Constants	5-13
Object Save Locations	5-13
Object Action Notifications	5-13
Notification Subscriptions	5-13
Application and User Role Security	5-14
Securing User Roles	5-14
Securing Administrative Updates	5-14
Selecting a Configuration Option	5-15
Configuration Settings Indicators	5-16
Configuring User Roles and Allowed Actions	5–17
Adding a User Role	5–18
Modifying a User Role	5–21
Deleting a User Role	5-22
Setting Up Allowed User Actions	5-23
Configuring OMW Functions	5-29
Disabling SAR Integration	5–29
Controlling Logging Detail	5-31
Controlling Development in the Event of Logging Failure	5-33
Setting Up Project Constants	5-33
Configuring Activity Rules	5-35
Setting Up Project Status Activity Rules	5-35
Default Status Defaults	5-35
Setting Up Object Transfer Activity Rules	5-38

	5-45
	5-45
Adding an Object's Save Location	5-45
Modifying an Object's Save Location	5-47
Deleting an Object's Save Location	5-48
Configuring Notification Subscriptions	5-49
Enabling or Disabling Object Action Notifications	5-49
Adding a Notification Subscription	5-50
	5-54
, ,	5-55
	5-55
	5-57
	5-57
	5-59
	5-67
	5-71
	5-74
	5-76
Configuration Worksheets	5-77
	5-77
· · · · · · · · · · · · · · · · · · ·	5-78
Setting Up Project Status Activity Rules	5-80
Setting Up Object Transfer Activity Rules	5-81
	5-85
	5-85
	5-86
Printing One World Deports	<i>L</i> 1
<b>5</b> I	6–1
Understanding OneWorld Printing	6–3
8 1	6-4
	6-4
	6-5
Print Settings for the Workstation jde.ini	
Working with the Printers Application	
Generating and Retrieving Logs for Your Report	
Setting Up a OneWorld Printer to Use a Barcode Font	_
Designing Reports to Run on OneWorld Line Printers	6–35
Work with Servers	7–1
	7–3
	7–4
Changing the Priority and the Printer for Jobs	
•	
Printing Johs	7-5
Printing Jobs	7-5 7-6
Viewing Reports Online	7–5 7–6 7–7
Viewing Reports Online	7–5 7–6 7–7 7–8
Viewing Reports Online  Viewing the Logs for a Job  Terminating Jobs	7–5 7–6 7–7 7–8 7–9
Viewing Reports Online Viewing the Logs for a Job Terminating Jobs Holding and Releasing Jobs	7-5 7-6 7-7 7-8 7-9 7-10
Viewing Reports Online  Viewing the Logs for a Job  Terminating Jobs  Holding and Releasing Jobs  Processing Options: Work with Servers (P986116)	7–5 7–6 7–7 7–8 7–9

What Are OneWorld Subsystems?	7-13
How Does OneWorld Use Subsystems?	7-14
	7-16
·	7-17
	7-19
Terminating OneWorld Subsystems	7-20
Menu Design	
8	8–1
o	8-1
O	8–2
8	8-3
Defining a New Menu	8-3
Reviewing Selections for a Menu	8-6
Printing a Menu Report	8-6
Example: Print Menus Report	8-7
Working with Menu Selections	8-9
Adding or Changing a Menu Selection	8-9
Adding an Application to a Menu	8-12
	8-19
Creating a Web View Subheading on a Menu	8-20
	8-21
	8-22
	8-25
Copying a Menu Selection	8-25
Changing Menu Text for Languages	8-26
Changing Menu Selection Text	8-28
Renumbering a Menu Selection	8-29
User Profiles	9–1
Understanding User Profiles	9-3
How Group Profiles Make Profiling Easier	9-3
Tables Used by the User Profiles Application	9-3
Adding New Users	9-5
Adding an Individual User	9-5
Adding Multiple Users	9-6
Setting Up User Profiles	9–9
Creating and Modifying User and Group Profiles	9-10
	9-13
Assigning Environments to User and Group Profiles	9-14
Assigning Business Preferences to User and Group Profiles	9-16
Understanding Processing Options for User Profiles	9-17
Creating Profiles Using a Batch Process	9-17
	9-21
	9-22
	9-22
	9-23
	9-24
Modifying a User Role	9_25

Security	10–1
Understanding Security Workbench	10-3
Understanding Users, Groups, and *PUBLIC	10-3
Understanding How OneWorld Checks Security	10-4
	10-4
·	10-5
	10-6
	10-7
·	10-7
Working with Security Workbench	10-9
	10-9
Setting Up Action Security	10-16
	10-20
• •	10-23
	10-25
	10-28
	10-31
Setting Up Exclusive Application Security	10-34
Setting Up External Calls Security	10-36
	10-38
	10-40
	10-41
Security Table Access	
Password Encryption	
	10-43
Process Flow for OneWorld Sign On Security	10-44
Signon Security for Web Users	10-49
·	10-53
	10-53
	10-66
Changing the jde.ini File for User Security	10-68
Setting Auxiliary Security Servers in the Workstation JDE.INI	10-69
Changing the Time-Out Value Due to Security Server Commu	
·	10-70
Setting Auxiliary Security Servers in the Server JDE.INI	
Verifying Security Processes in the Server JDE.INI	
Running a Security Analyzer Report	
Running the Security Analyzer by Data Source Report (R98OWSE	
10–74	011)
Running the Security Analyzer by User or Group Report (R98OW	SECB)
10–76	olob)
Setting Up Unified Logon	10-78
ActivEra Portal Configuration	10-83
	10-83
	10-84
	10-85
	10-87
	10-91
Setting Component Permissions	10-92

Solution Explorer Security	10–95 10–95 10–96 10–97 10–97
Vocabulary Overrides  Accessing Vocabulary Overrides  Creating Vocabulary Overrides  Reviewing Vocabulary Overrides  Resetting Vocabulary Overrides	<b>11-1</b> 11-3 11-7 11-13 11-15
The Scheduler Application Scheduling Jobs Scheduling a Job Scheduling a Recurring Job Revising a Scheduled Job Entering Scheduler Processing Options Reviewing all Jobs or Local Jobs	12-1 12-3 12-3 12-6 12-9 12-12 12-14
Working with Job Properties	12-17 12-17 12-19 12-20 12-22
Adding Values to a Report Interconnect  Working with the Job Schedule  Reviewing All Job Schedules  Changing the Launch Status of a Job  Viewing Job Details  Setting the Job Status Manually  Resetting the Job Schedule	12-24 12-27 12-27 12-29 12-30 12-31 12-32
Understanding the Scheduler Server  Control Record  Dispatch Function  Launch Loop  Job Monitor Loop  Working with the Scheduler Server  Modifying Daylight Savings Rules	12-33 12-34 12-35 12-36 12-39 12-43
Running Scheduler Reports	12–47 <b>13–1</b> 13–1 13–2
Enabling OneWorld to Use Media Objects  Working with Media Object Queues  Image Media Objects  OLE Media Objects  URL Media Objects  Media Object Tables	13-3 13-9 13-9 13-10 13-10
OneWorld Text Items	13_11

	13-15
Understanding Flow for Imaging Systems	13-15
Imaging Process Flow	13-17
Universal Table Browser	14-1
Viewing the Data in Tables	14-3
8	
OneWorld Naming Conventions	15–1
Path Codes	15–1
Data Sources	15–1
Package Names	15–2
Server Names	15–2
Workstation Names	15–2
The ide in File	16–1
The jde.ini File	
Locating the jde.ini File	16-2
Understanding Workstation jde.ini Settings	16-3
[DB SYSTEM SETTINGS]	16-3
[DB SYSTEM SETTINGS - SECONDARY]	16-5
[OFFLINE DB SYSTEM SETTINGS]	16-5
[DEBUG]	16-6
[EVEREST]	16-8
[INSTALL]	16-8
[JDE CG]	16-9
[JDEMAIL]	16-10
[JDENET]	16-10
[JDENET KERNEL DEFx]	16-10
[LOCK MANAGER]	16-11
[NETWORK QUEUE SETTINGS]	16-11
[OBJECT LIBRARIAN]	16–11
	16–12
[PORTAL ENNMAR]	
[PORTALENVMAP]	16-13
[REPLICATION]	16-13
[SECURITY]	16-13
[SVR]	16-14
[TAPI]	16–15
[TAPI - driver]	16–16
[UBE]	16–16
[WORKFLOW]	16–16
[EXPLORER]	16-17
[ACTIVE DIRECTORY]	16-17
Understanding AS/400 Server JDE.INI Settings	16-19
[AS400]	16-19
[BSFN BUILD]	16-20
[DB SYSTEM SETTINGS]	16-21
[DEBUG]	16-24
[INSTALL]	16-25
[JDEIPC]	16-26
[JDEMAIL]	16-26
[JDENET]	16-26
[IDENET] KERNEL DEEX!	16-27

[LOCK MANAGER]	16-30
[NETWORK QUEUE SETTINGS]	16-30
[SECURITY]	16-31
[SVR]	16-32
[TCENGINE]	16-32
[UBE]	16-32
[WORKFLOW]	16-33
[WORLD ENVIRONMENT MAP]	16-34
Understanding UNIX Server jde.ini Settings (HP9000, RS/6000, or Sun Se	rvers)
16–35	
[BSFN BUILD]	16-35
[CLUSTER]	16-38
[DB SYSTEM SETTINGS]	16-38
[DEBUG]	16-39
[INSTALL]	16-40
[JDEIPC]	16-40
[JDEMAIL]	16-41
[JDENET]	16-41
[JDENET_KERNEL_DEFx]	16-42
[LOCK MANAGER]	16-47
[MEMORY DEBUG]	16-47
[NETWORK QUEUE SETTINGS]	16-47
[SECURITY]	16-48
[SERVER ENVIRONMENT MAP]	16-48
[SVR]	16-48
[TAM]	16-49
[UBE]	16-49
[WORKFLOW]	16-50
Understanding Windows NT Enterprise Server jde.ini Settings	16-51
[BSFN BUILD]	16-51
[BSFN Builder]	16-52
[DB SYSTEM SETTINGS]	16-53
[DEBUG]	16-53
[INSTALL]	16-55
[JDE_CG]	16-56
[JDEIPC]	16-56
[JDEMAIL]	16-57
[JDENET]	16–57
[JDENET_KERNEL_DEFx]	16–58
[LOCK MANAGER]	16-64
[NETWORK QUEUE SETTINGS]	16-64
[NLS]	16-65
[SECURITY]	16-65
[SERVER ENVIRONMENT MAP]	16–66
[SVR]	16-66
[UBE]	16-67
[ACTIVE DIRECTORY]	16-67
Understanding Server jde.ini Settings for WebSphere	16–69
See Also	16–69
[JDENET]	16-69
IDENET KERNEL DEE13]	16-69

# **OneWorld System Administration**

[MQSI]	16-70
Understanding Java Server jas.ini Settings	16-73
[OWWEB]	16 - 74
[CACHE]	16-77
[CONNECTION POOL]	16 - 78
[JDBC URL]	16-79
[JDBC Drivers]	16-80
[SERVER COMPONENTS]	16-80
[JDENET]	16-81
[SERVER]	16-82
[LOGS]	16-82
[DB SYSTEM SETTINGS]	16-83
[SECURITY]	16-85
Optional jas.ini Settings for the ActivEra Portal	16-86
Glossary	

# Index

# **Overview to System Administration**

The guides that comprise the *Configuration Planning and Setup* suite are designed for use by Configurable Networking Computing (CNC) specialists, OneWorld system administrators, and network or server administrators. The assumption throughout these guides is that the initial OneWorld installation is complete and the standard data sources, path codes, and environments are defined. These guides tell you how to make changes or additions to the configuration setup after the initial installation.

The Configuration Planning and Setup suite consists of the following guides:

- *Configurable Network Computing Implementation*. This guide is written for primarily CNC specialists and contains the following topics:
  - Understanding middleware and verifying that you have specified the correct middleware for your servers
  - Understanding data sources and verifying that the necessary ones have been created
  - Understanding and creating path codes and environments
  - Working with the Object Configuration Manager
  - Understanding the different modes of processing
  - Understanding a typical OneWorld customer configuration
- *System Administration*. This guide is written mainly for OneWorld system administrators and contains the following topics:
  - Middleware
  - Understanding and setting up data replication
  - Setting up printers
  - Using the Work with Servers program
  - Setting up user profiles
  - Setting up OneWorld security
  - Understanding and working with data dictionary administration
  - Object Management Workbench
  - Understanding vocabulary overrides
  - Understanding transaction processing
  - Working with media objects and imaging
  - Using the universal table browser

- Understanding OneWorld naming conventions
- Understanding the jde.ini file
- Package Management. This guide is written for OneWorld system administrators and others who manage custom modifications to the OneWorld environments. Package Management contains the following topics:
  - Package management planning and setup
  - OneWorld modification rules
  - Object management
  - Building packages
  - Deploying packages
  - Server packages
  - Multitier deployment
- Server and Workstation Administration. This guide is written primarily for network administrators and contains the following topics:
  - Understanding Snapshot (multiclient installer)
  - Server administration
  - Troubleshooting the workstation
  - Troubleshooting the server

Although every attempt has been made to organize the information in the *Configuration Planning and Setup* guides according to related tasks, a CNC specialist, OneWorld administrator, or network administrator might find that the information needed to perform the duties of that position is described in more than one guide. For example, the person who is responsible for setting up path codes, environments, and data sources (described in the *Configurable Network Computing Implementation Guide*) might also be responsible for building and deploying packages (described in the *Package Management Guide*).

The *Configuration Planning and Setup* suite is the central location for all CNC-related tasks except:

- Initial installation of OneWorld. See the OneWorld Installation Guide.
- OneWorld upgrade and cumulative updates. See the OneWorld Upgrade Guide.
- Network infrastructure and third-party software setup and maintenance. This information is provided by the applicable software or hardware vendor. J.D. Edwards does not provide this documentation.

You do not need a complete understanding of the installation process to perform configuration planning and setup tasks. However, to use the *Configuration Planning and Setup* guides, it is important that you understand what the installation accomplishes.

# **Understanding OneWorld Roles**

The OneWorld implementation methodology defines specific roles:

- CNC consultant and CNC administrator
- Custom solution consultant and application developer
- Application consultants and application project leaders
- Hardware, network, and third-party software consultants and administrators

Each of these roles is performed by both a consultant and a customer. After implementation, the role of the consultant is diminished. Therefore, customers must ensure that adequate training occurs for each of the roles to be assumed by their personnel.

#### **CNC Consultant and CNC Administrator**

CNC consultants and CNC administrators are involved with the installation of OneWorld and the setup of environments, users, security, distributed processing, and data replication. They are also responsible for the setup of version control and testing of various CNC configurations. The CNC consultant and CNC administrator control the deployment of OneWorld software throughout the company.

## **Custom Solution Consultant and Application Developers**

OneWorld custom solution consultants resolve business issues by developing applications. Their primary responsibilities include designing the modifications with upgrades in mind, and developing, testing, and introducing the customized software. While the CNC administrator performs the version control functions that build and deploy software, the customer solution consultant must help develop the internal procedures for the application development cycle for your business.

## **Application Consultants and Application Project Leaders**

After OneWorld is installed, configured, and rolled out, the application consultants continue in their role as product experts. Although application consultants do not implement the CNC configurations, they must understand how OneWorld handles distributed processing, data replication, and environments, because these application issues influence the CNC decisions. In addition, application consultants must be proficient at troubleshooting potential problems.

# Hardware, Network, and Third-Party Software Consultants and Administrators

Implementing OneWorld includes many tasks that are outside the scope of J.D. Edwards services. Third-party consultants provide these services, as well as supplement our staff as CNC consultants, network architects, and custom modification consultants.

# **Understanding The System Administration Guide**

The System Administration Guide focuses primarily on how to:

- Use the flexibility of the CNC architecture to optimize the OneWorld installation to your enterprise.
- Extend an initial installation (CRP) to meet the practical requirements of a specific enterprise.
- Recognize, address, and solve the day-to-day issues that arise in a dynamic enterprise.

Although this guide is aimed primarily at OneWorld system administrators, those with other job functions might find the information useful or essential to their positions as well.

This guide includes the following topics:
☐ Middleware
☐ Data replication
☐ Data dictionary administration
Object Management Workbench Configuration
☐ Printing OneWorld reports
☐ Work with Servers
☐ Menu design
☐ User profiles
☐ Security
☐ Vocabulary Overrides
☐ The Scheduler Application
☐ Media objects and imaging

Universal Table Browser
OneWorld naming conventions
The jde.ini file

## Middleware

#### Middleware

In a client/server environment, applications must communicate across different platforms. These platforms can have different communication protocols, database management systems, and hardware operating systems. For clients to communicate with servers and servers to communicate with other servers, a mechanism must exist that can bridge multiprotocol and multivendor issues. This mechanism is a layer of software called middleware, which resides between the operating system and the business applications. It is important to have an application architecture that is based on a single, consistent middleware strategy. J.D. Edwards provides the following types of middleware:

Middleware			Description	
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# Middleware

**JDENet Communication** Performs the connections from workstation to server and server to server, and sends messages for distributed requests. It is a peer-to-peer, message-based, socket-based, multiprocess communication middleware solution.

#### **JDEBASE Database** Middleware

Provides platform-independent application programming interfaces (APIs) for multidatabase access. These APIs are used in two ways:

- By OneWorld applications that dynamically generate platform-specific Structured Query Language (SQL), depending on the data source request.
- As open APIs for writing advanced business functions in the C language. OneWorld uses these APIs to dynamically generate platform-specific SQL statements.

JDEBASE also provides workstation-to-server and server-to-server database access. To accomplish this, OneWorld is integrated with a variety of third-party database drivers, such as IBM Client Access/400 database software, Open Database Connectivity (ODBC), and Oracle Call Interface (OCI). The exact driver requirements are listed in the *Hardware and Software Requirements* sections of the platform-specific OneWorld Installation Guide.

# System Administration

This section discusses the following topics:
☐ Understanding JDENet communication middleware
☐ Understanding JDEBASE database middleware

# **Understanding JDENet Communication Middleware**

For two computers to communicate with each other, they must share a communication protocol, or set of protocols. A communication protocol is a formal set of rules that specifies the format and relationship for exchanging data among different devices. The following are the protocol layers with which the communication middleware is concerned:

<b>Protocol Layer</b>	Description
Network layer	Handles addressing and routing information, error checking, and retransmission requests.
Transport layer	Provides connection-oriented data-delivery services across networks. These protocols provide end-to-end data exchanges in which systems maintain a session or connection with each other for the reliable sequenced exchange of data.
	OneWorld supports the Transmission Control Protocol/Internet Protocol (TCP/IP) suite of protocols.
Application layer	Provides application-to-application interaction and data exchange. JDENet is the application layer communication middleware.

## **JDENet Communication Middleware**

JDENet is the J.D. Edwards proprietary communications middleware package that provides for server-to-server and client-to-server communication. Its features include:

Socket-based communication
Message-based communication
OneWorld process-based design
OneWorld dedicated process design
jde.ini settings

JDENET middleware process flow
Load balancing design
Load balancing among NET processes
Load balancing across NET/KERNEL processes
Server Administration Workbench (SAW)

JDENet provides client-to-server and server-to-server communications. With JDENet, any machine on a peer-to-peer network can function as a client or a server at any given time. A machine on a peer-to-peer network functions as a client when it initiates a request and as a server when it responds and provides a service to a client's request. In OneWorld, the majority of requests typically originate from an end user's workstation. However, servers can also initiate requests to other servers. An example of this is server-to-server push replication.

With JDENet, communications among the machines on the network occur through an exchange of messages. Examples of JDENet messages include requests and responses for business functions, batch jobs, data replication, and OneWorld signon security. For example, a machine can send a message requesting a remote business function call. The target machine responds by executing the business function locally and returning the results to the requesting machine.

Requests can be synchronous or asynchronous. A synchronous message, such as a business function call, requires the client to wait for the server to complete the request. An asynchronous request, such as a batch process, allows the client to continue with another task while OneWorld processes the request. In some circumstances, business functions can also be called asynchronously.

#### **Socket-Based Communication**

Sockets provide a duplex communication channel between one or more systems. Sockets guarantee that the data arrives intact. JDENet uses stream sockets to provide end-to-end communications.

## **Message-Based Communication**

Message-based communication means that applications send service requests for logic or data in the form of messages that are received and stored in a queue for processing. The middleware handles message transmission, which allows the workstation application to process other tasks. Without messaging services to handle these jobs, the application must wait until the request is handled and the results returned.

Messaging is most appropriate for applications that are event driven. It is the opposite of remote procedure calls (RPC), which are synchronous. The message

packaging and handshaking of JDENet ensures that the message transmission is complete.

#### **OneWorld Process-Based Design**

In a Windows environment, although client workstations can have more than one copy of OneWorld installed, only one instance of the OneWorld client can be running on that machine at any one time. When communicating with a OneWorld server, the OneWorld client uses dynamic link libraries (DLLs) to run an internal network thread. This process is the client-side portion of the JDENet communications middleware and is also referred to as a jdenet thread.

On the OneWorld server side, the JDENet process communicates with the OneWorld client and routes request messages to appropriate dedicated processes. In turn, the dedicated processes apply to the appropriate server platform-specific logic. A server can have multiple OneWorld main processes, multiple OneWorld dedicated processes, and job queues.

The advantage of this client/server architecture is that multiple workstations can make requests to the same server at one time. You can control the number of workstations that can make and maintain a session connection to a main server process. Further, you can define the total number of dedicated processes (and the number of each type) that OneWorld uses to process specific types of workstation requests.

There is a relationship between the network processes, the dedicated processes, and the logic processes. This relationship is specifically defined by the jde.ini file on the enterprise server. Every enterprise server must have at least one OneWorld network process, referred to as a JDENET\_n job. This job handles network connections and traffic for OneWorld.

This to	opic discusses:
	Network processes
	Kernel processes

#### **Network Processes**

The OneWorld network process is called a JDENET\_n job. The purpose of this constantly-running job is to handle OneWorld communication messages by monitoring the network for incoming messages to OneWorld and also monitoring OneWorld for outgoing messages to the network. As defined in the OneWorld initialization file (jde.ini) for each server, there can be multiple JDENET n processes.

Regardless of the number of JDENET\_n processes, the initial JDENET\_n process is the Master Listener. The Master Listener is the only process that directly monitors the network for OneWorld messages and passes those messages to

additional JDENET\_n processes, if defined, or to other jobs for processing as required.

The responsibility of the JDENET\_n process is to handle the network layer of communication. That is, it does not perform any actual logic processing but instead performs message handling. If the JDENET\_n job determines that the incoming message is a request for logic processing, it routes the request to an appropriate JDENET k job, called a OneWorld kernel process.

#### **Kernel Processes**

The responsibility of the JDENET\_k job is to handle the two-way routing to and from the various logic processes while the JDENET\_n job handles the return delivery to the appropriate machine. OneWorld uses a number of predefined and dedicated kernel types, which are essentially virtual servers. Each kernel type is responsible for a specific OneWorld process.

OneWorld determines an appropriate JDENET\_k job to process the job based on message identifiers generated by OneWorld. The JDENET\_k process only applies to servers.

Examples of logic processes include .DLLs for Windows NT platforms, shared libraries (.sl) for UNIX platforms, and JDENet processes for AS/400 platforms.

## **OneWorld Dedicated Process Design**

Because JDENet is a message-based architecture, you can label each message with a message type identifier. JDENet uses this identifier to route messages to a range of processes dedicated to handling requests that fall within a specified range. The following process types have been defined:

- Type 1 OneWorld internal and testing processes
- Type 2 OneWorld batch process (UBE) pass-through
- Type 3 Data replication requests
- Type 4 Security processes
- Type 5 Transaction manager and lock manager
- Type 6 Remote Master Business Function (MBF)
- Type 7 JDBNET server-to-server
- Type 8 Package installation
- Type 9 Server Administration Workbench (SAW)
- Type 10 Scheduler
- Type 11 Package build

Additionally, dedicated processes also allow third parties to hook into and interface with the JDENet architecture. That is, third parties can write their own

platform-specific logic processes that conform to OneWorld published APIs. Third-party developers should design these programs (for example, .dll, .sl, or job queue) to process only a specific and currently unused range of OneWorld messages.

## jde.ini Settings

A variety of settings control the definition and function of the JDENET\_n and JDENET\_k processes. These settings are contained with the following main sections of the server-specific jde.ini:

- [JDENET]
- [JDENET KERNEL DEF1]
- [JDENET KERNEL DEF2]
- [JDENET\_KERNEL\_DEF3]
- [JDENET KERNEL DEF4]
- [JDENET KERNEL DEF5]
- [JDENET KERNEL DEF6]
- [JDENET KERNEL DEF7]
- [JDENET KERNEL DEF8]
- [JDENET KERNEL DEF9]
- [JDENET KERNEL DEF10]
- [JDENET KERNEL DEF11]

This topic discusses the following jde.ini settings:

- ☐ JDENET\_n settings
- JDENET k settings
- ☐ Purpose of [JDENET] jde.ini settings
- ☐ Purpose of [JDENET\_KERNEL\_DEFx] jde.ini settings

#### See Also

• The *jde.ini File* for detailed information about jde.ini file settings.

#### JDENET\_n Settings

The characteristics of the JDENET\_n jobs are controlled by the following jde.ini settings. These settings are fully described in the following topic. For the network processes, there are three user-definable values (shown in *italic type*) in the [JDENET] section of the jde.ini.

[JDENET]

netPgmName=network program name
maxNetProcesses=number of jdenet\_n processes
maxNetConnections=number of connections to the server

#### JDENET\_k Settings

For servers only, the characteristics of the JDENET\_k jobs are controlled by the following jde.ini settings. These settings are fully described in the following topic. For the kernel process, there are three user-definable settings in the [JDENET] section of the jde.ini. There are also a number of individual sections in the jde.ini that are used to define the kernel types. In these kernel type definition sections, there are only three user-definable values (shown in *italic type*) for each kernel type.

[JDENET]
KrnlPgmName=kernel program name
maxKernelProcesses=number of jdenet\_k processes
maxKernelRanges=number of kernel ranges

[JDENET\_KERNEL\_DEF1]
dispatchDLLName=platform-specific program name
dispatchDLLFunction=JDENET\_DispatchMessage
maxNumberOfProcesses=value
beginningMsgTypeRange=0
endingMsgTypeRange=255

[JDENET\_KERNEL\_DEF2]
dispatchDLLName=platform-specific program name
dispatchDLLFunction=JDEK\_DispatchUBEMessage
maxNumberOfProcesses=value
beginningMsgTypeRange=256
endingMsgTypeRange=511

[JDENET\_KERNEL\_DEF3]
dispatchDLLName=platform-specific program name
dispatchDLLFunction=DispatchRepMessage
maxNumberOfProcesses=value
beginningMsgTypeRange=512
endingMsgTypeRange=550

[JDENET\_KERNEL\_DEF4]
dispatchDLLName=platform-specific program name
dispatchDLLFunction=JDEK\_DispatchSecurity
maxNumberOfProcesses=value
beginningMsgTypeRange=551
endingMsgTypeRange=580

#### [JDENET\_KERNEL\_DEF5]

dispatchDLLName=platform-specific program name dispatchDLLFunction=TM\_DispatchTransactionManager maxNumberOfProcesses=value beginningMsgTypeRange=601 endingMsgTypeRange=650

#### [JDENET KERNEL DEF6]

dispatchDLLName=platform-specific program name dispatchDLLFunction=JDEK\_DispatchCallObjectMessage maxNumberOfProcesses=value beginningMsgTypeRange=901 endingMsgTypeRange=1156

#### [JDENET KERNEL DEF7]

dispatchDLLName=platform-specific program name dispatchDLLFunction=JDEK\_DispatchJDBNETMessage maxNumberOfProcesses=value beginningMsgTypeRange=1201 endingMsgTypeRange=1456

#### [JDENET KERNEL DEF8]

dispatchDLLName=platform-specific program name dispatchDLLFunction=JDEK\_DispatchPgkInstallMessage maxNumberOfProcesses=value beginningMsgTypeRange=1501 endingMsgTypeRange=1756

#### [JDENET KERNEL DEF9]

dispatchDLLName=platform-specific program name dispatchDLLFunction=JDEK\_DispatchSAWMessage maxNumberOfProcesses=value beginningMsgTypeRange=2001 endingMsgTypeRange=2256

#### [JDENET KERNEL DEF10]

dispatchDLLName=platform-specific program name dispatchDLLFunction=JDEK\_DispatchScheduler maxNumberOfProcesses=value beginningMsgTypeRange=2501 endingMsgTypeRange=2756

#### [JDENET\_KERNEL\_DEF11]

dispatchDLLName=platform-specific program name dispatchDLLFunction=JDEK\_DispatchPkgBuildMessage maxNumberOfProcesses=value beginningMsgTypeRange=3001 endingMsgTypeRange=3256

## Purpose of [JDENET] jde.ini Settings

This section presents a table that defines the only user-definable settings in the [JDENET] section of the jde.ini. These sections contain important settings that define the JDENET\_n and JDENET\_k processes. These settings are listed in the order that they typically appear in the jde.ini file. Where applicable, associated settings are cross-referenced.

## [JDENET] - User-definable Settings

Setting	Value
maxNetProcesses	Defines the maximum number of JDENET_n jobs that can run on this OneWorld server. This value can be from 1 to <i>n</i> . You can increase this value for a server that is expecting heavy JDENET message flow.
	If multiple JDENET_n jobs are specified, OneWorld starts the jobs as required allocating a job to each request. When the maximum number of JDENET_n processes are started, OneWorld automatically alternates between the currently running JDENET_n jobs until the maximum number of connections is reached. This provides a degree of load balancing between OneWorld network processes. If, on a given server, the maximum number of connections is met, a client or server cannot initiate an additional OneWorld session on that server until an existing session connection is ended. This is because, by design, all connections to JDENET_n are persistent for the duration of a OneWorld session.
	Typical Value (all platforms): Dependent on the number of users.
	Related Value: maxNetConnections
maxNet	Defines the maximum number of connections.
Connections	Typical value (all platforms except Windows NT): 800.
	Typical value (Windows NT platforms): 400
	Related value: maxNetProcesses
maxKernel Processes	Defines the maximum number of jdenet_k of processes (or jobs, depending on the platform).
	This is the product of all definition types (defined by maxKernelRanges) and the number of each kernel type (defined by maxNumberOfProcesses for each kernel type).
	Typical value (all server platforms): Depedent on how the system is configured and on the number of users.
	Related value: maxNumberOfProcesses in each [JDENET_KERNEL_DEFx] section
maxKernelRanges	Defines the maximum number of kernel types that the JDENET_k job can call.
	A kernel type is defined by a specific definition labeled in the jde.ini as [JDENET_KERNEL_DEFx] where x is a valid number associated with a dedicated kernel process type. OneWorld preassigns each kernel type to handle a specific range of messages.
	Typical value (all server platforms): 11
	Related values: See the following tables for each [JDENET_KERNEL_DEFx] range

## Purpose of [JDENET\_KERNEL\_DEFx] jde.ini Settings

This section presents a table that defines the [JDENET\_KERNEL\_DEFx] section of the jde.ini. Because each dedicated kernel requires a separate definition, there are 11 uniquely-numbered kernel definition sections. Depending on the platform, the kernel code might be different according to the specialized uses of the kernels. Also, each kernel is defined to handle a specific range of messages.

#### See Also

• The *jde.ini File* for a complete description of each setting in the jde.ini file.

The following table describes the user-definable settings for the JDENET\_k processes.

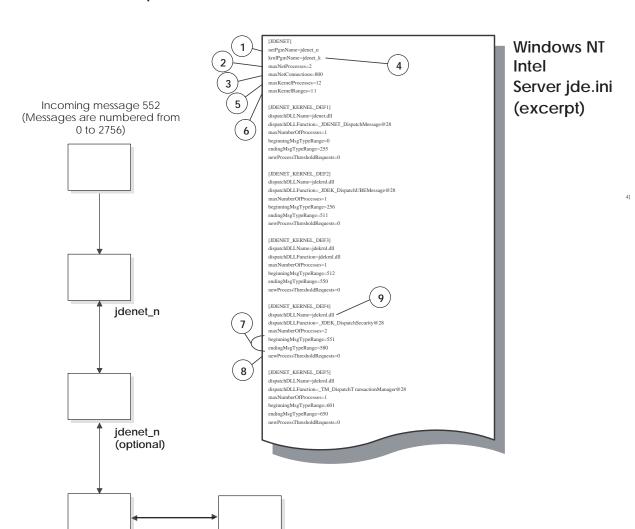
#### [JDENET\_KERNEL\_DEFx] - User-definable Settings

Setting	Value	
dispatchDLLName	Defines the name of the JDENET_k job running on a OneWorld server. The program name varies according to server platform and kernel function.	
	OS/400 on AS/400 - Typical values:	
	DEF1: JDENET	
	DEF2: JDEKRNL	
	DEF3: JDEKRNL	
	DEF4: JDEKRNL	
	DEF5: JDEKRNL	
	DEF6: JDEKRNL	
	DEF7: JDEKRNL	
	DEF8: JDEKRNL	
	DEF9: JDESAW	
	DEF10: JDEKRNL	
	DEF11: JDEKRNL	
	Windows NT on Intel/Compaq AlphaServer processor - Typical values:	
	DEF1: jdenet.dll	
	DEF2: jdekrnl.dll	
	DEF3: jdekrnl.dll	
	DEF4: jdekrnl.dll	
	DEF5: jdekrnl.dll	
	DEF6: jdewapi.dll	
	DEF7: jdekrnl.dll	
	DEF8: jdekrnl.dll	
	DEF9: jdesaw.dll	
	DEF10: jdekrnl.dll	
	DEF11: jdekrnl.dll	

UNIX (HPUX) on HP9000 - Typical Values:
DEF1: libjdenet.sl
DEF2: libjdeknet.sl
DEF3: libjderepl.sl
DEF4: libjdeknet.sl
DEF5: libtransmon.sl
DEF6: libjdewapi.sl
DEF7: libjdeknet.sl
DEF8: libjdeknet.sl
DEF9: libjdeknet.sl
DEF8: libjdeknet.sl
DEF9: libjdesaw.sl
DEF10: libjdeschr.sl
DEF11: libjdeknet.sl
UNIX (AIX) on RS/6000 - Typical Values:
DEF1: libjdenet.so
DEF2: libjdekrnl.so
DEF3: libjdekrnl.so
DEF4: libjdekrnl.so
DEF5: libjdekrnl.so
DEF6: libjdewapi.so
DEF7: libjdekrnl.so
DEF8: libjdekrnl.so
DEF9: libjdesaw.so
DEF10: libjdekrnl.so
DEF11: libjdekrnl.so
Defines the maximum number of processes that can run for this kernel definition type. You can increase this value for a server that is expecting higher connection volumes for a particular kernel function.
For example, if your server is dedicated to a particular function like package builds, you could increase this value in the [JDENET_KERNEL_DEF9] section. If you increase this value, you will also need to increase the value of the maxKernelProcesses in the [JDENET] section.
Typical Value (all platforms): 1
Related Value: [JDENET] maxKernelProcesses

## **JDENet Middleware Process Flow**

The following diagram shows the process flow from JDENET\_n to JDENET\_k as it might be set in a typical environment.



#### **Example: JDENet Middleware Process Flow**

As numbered on the preceding diagram, the first three steps occur only on the first message form a client workstation:

Platform-dependent compiled code

jdenet\_k

1 The Master Listener JDENET\_n process accepts the message request. In this example, the name of the network job is jdenet\_n as defined by the following setting:

```
[JDENET]
krnlPgmName=jdenet_n
```

2 The Master Listener JDENET\_n process reads the jde.ini and determines if multiple network jobs are specified. In this example, multiple network jobs are allowed as defined by the following setting:

```
[JDENET]
maxNetProcesses=2
```

3 The Master Listener JDENET\_n process reads the jde.ini and determines if the maximum number of network connections have been established for this server. In this example, the JDENET\_n process checks to see if fewer than 1,600 connections are established as defined by reading the following settings:

```
[JDENET]
maxNetProcesses=2
maxNetConnections=800
```

If required and allowed, the JDENET\_n process starts another JDENET\_n process.

**Note:** The process reads the jde.ini file only when the process starts. For all subsequent processing, the information remains in memory.

4 The JDENET\_n process accepts the message and determines that it is a logic request. It reads the jde.ini and determines the name of the kernel job. In this example, the name of the kernel job is jdenet\_k as defined by the following setting:

```
[JDENET]
krnlPgmName=jdenet_k
```

5 The JDENET\_n process reads the jde.ini and determines if the maximum number of kernel processes has been met. In this example, that value is defined by the following setting:

```
[JDENET]
maxKernelProcesses=12
```

6 The JDENET\_n process reads the jde.ini and determines if the maximum number of kernel ranges has been met. If neither the maximum number of processes nor maximum number of ranges has been exceeded, the request is passed to the JDENET\_k job. In this example, the value of the maximum number of ranges is specified by the following setting:

```
[JDENET]
maxKernelRanges=11
```

7 Based on the message type number, the JDENET\_k job determines the kernel definition type. In this case, the message number is 552. By definition, this message number falls into the range defined as kernel type definition 4, which is the security server. In this example, the type 4 kernel is defined by the following settings:

```
[JDENET_KERNEL_DEF4]
dispatchDLLName=jdekrnl.dll
dispatchDLLFunction=_JDEK_DispatchSecurity
maxNumberOfProcesses=2
beginningMsgTypeRange=551
endingMsgTypeRange=580
newProcessThresholdRequests=0
```

. 8 The kernel job reads the jde.ini to determine the maximum number of logic processes that are allowed for Type 4 kernel processes. In this example, the value for the maximum number of Type 4 kernel processes is specified by the following setting:

```
[JDENET_KERNEL_DEF4]
maxNumberOfProcesses=2
```

If required and allowed, the JDENET\_k process starts another platform-specific logic process.

9 The JDENET\_k job reads the jde.ini to determine which platform-specific process to call for the actual logic processing. In this example, the server platform is a Windows NT with an Intel processor. Therefore, the platform-specific process is a dynamic link library (DLL) named jdekrnl.dll. If that kernel job is not already started, the JDENET\_k process call causes it to start. If the job is already started, the request is queued to the next available logic process that is identified to run this message type request. In this example, the platform-specific logic process is identified by the following setting:

```
[JDENET_KERNEL_DEF4]
dispatchDLLName=jdekrnl.dll
```

## **Load Balancing Design**

Because a server can have multiple net processes (JDENet) and multiple dedicated internal processes, you must establish a configuration that provides an optimal number of processes on a server. This system administration concept is called load balancing. Load balancing allows OneWorld to maximize its overall performance by using the available processing power of the platform on which it is running.

The load balancing configuration is controlled by various interrelated runtime settings in the jde.ini file on the server. These settings are in the [JDENET] and applicable [JDENET\_KERNEL\_DEFx] sections. All relevant settings are listed and described in the preceding section. You can control two types of processes:

- Network jobs (JDENET n)
- Dedicated kernel process jobs (JDENET\_k)

**Note:** The words "job" and "process" are used interchangeably in the following discussion of NET and KERNEL load balancing. In AS/400 terminology, the word "job" is used exclusively to refer to processes.

## Load Balancing among NET Processes

NET processes are responsible for sending messages to and receiving messages from client workstations. You can set the number of network jobs to control how many users are simultaneously connected to each net process. If you have 200 users and you want a net process for each 100 users, you should specify three net processes because the first net process doesn't handle any users. Instead, it plays the role of the listener, waiting for incoming communications that it routing incoming jobs to the other processes.

The controlling setting in the jde.ini file is:

```
[JDENET]
maxNetProcesses=variable
```

The OneWorld server has a mechanism for handling load balancing among NET processes. The following series of steps explains the mechanism:

- First, the OneWorld server starts the initial NET process.
- The first NET process listens for incoming communications packets at a port defined in the ServiceNameListen parameter of the jde.ini file.
- The first NET process checks to see if the number of NET processes currently running is equal to or greater than the maximum allowed by the MaxNetConnections parameter in the jde.ini file.
- If the MaxNetConnections parameter value has not been met or exceeded, the first NET process creates a new NET process.

- The first NET process communicates to the client workstation the port number to which it must connect to communicate with the new NET process. The new NET process can listen and answer at the new port.
- When the maximum number of NET processes have been created, the first NET process delegates new connections to the existing processes in sequential fashion.

They key factors in OneWorld's load balancing design are:

- The first NET process carries the responsibility for creating new NET processes and identifying the NET process to which the client must connect. It does not establish a connection with workstations for services; rather, it remains open for handling connection requests.
- The first NET process distributes connections among the NET processes sequentially. No process can be responsible for more than one more workstation than can any other process.

**Note:** When client workstations log off, one process might temporarily handle more than its usual share of the load. However, as new client workstations log on, the first NET process assigns the connections to processes that are handling a lighter load.

## Load Balancing across NET/KERNEL Jobs

You can set the number of dedicated process jobs to control how many instances of each dedicated process type are running. For example, if you think that increasing the number of Type 2 dedicated processes might improve the processing performance for batch process (UBE) requests, you can increase the value. The controlling setting is contained in the definition for each dedicated process type (the *x* variable value in JDE\_KERNEL\_DEF*x*, where allowable values are from 1 to 11):

```
[JDENET_KERNEL_DEFx]
maxNumberOfProcesses=variable
```

If you increase the number of individual dedicated processes, you must also increase the value of maxKernelProcesses in the [JDENET] section. For example, if maxKernelProcesses=11:

```
[JDENET]
maxKernelProcesses=11
```

and you increase the number of Type 2 processes from 1 to 2:

```
[JDENET_KERNEL_DEF2]
maxNumberOfProcesses=2
```

you must increase the maxKernelProcesses value from 11 to 12:

[JDENET]
maxKernelProcesses=12

After a NET process (jdenet\_n) receives a JDENET message, it sends the message to one of the KERNEL processes. The OneWorld server has a mechanism for handling load balancing for KERNEL jobs. OneWorld uses the following criteria to determine which KERNEL (jdenet k) process should receive the message:

- The NET process searches for a KERNEL process that is idle. A kernel is idle if the user count equals 0 and it is waiting for a message to handle.
- If the NET process cannot find an idle KERNEL process, it searches for a KERNEL process that has no outstanding requests. If one exists, the NET process sends the message to that KERNEL.
- If there is no KERNEL process that is idle and and all KERNEL processes have outstanding requests, the NET process sends the message to the KERNEL process with the smallest user count.

By assigning new requests to the KERNEL with the least processing responsibility, the OneWorld server achieves load balancing.

## Server Administration Workbench (SAW)

You can use the OneWorld Server Administration Workbench (SAW) to monitor programs and observe the number of OneWorld network connections and other load-based factors that might be used to evaluate the performance of server processes. This information is useful for making load balancing decisions, such as whether to increase the number of processes or network connections to increase performance. You can also use the monitoring programs to enable various logs and traces useful for troubleshooting purposes.

SAW provides the server administrator with vital statistics concerning the internal functions of OneWorld. The functionality of SAW includes embedded notification capabilities. Using configurable e-mail or pager push delivery mechanisms, specified server administrators are notified:

- Every time a server is started or stopped
- Of initial and changed server status, such as up or down
- Of overloaded conditions when a process' configurable outstanding request threshold is reached

The SAW program also allows you to do the following:

- View the number of active JDENet and OneWorld processes running
- View incoming processing requests that are issued by a OneWorld process

- Shut down OneWorld running on the server
- View information about workstation and server connections
- View the OneWorld workstation and server configuration settings
- Notify workstations if a server shuts down
- Allow the collection and display of OneWorld message-flow statistics

### See Also

• Server Administration Workbench in the Server and Workstation Administration Guide

## **Understanding JDEBASE Database Middleware**

Different database management systems have their own version of Structured Query Language (SQL). A database middleware layer allows a common interface to interpret the various versions of SQL. J.D. Edwards database middleware product, JDEBASE, is a common set of application programming interfaces (APIs) that programmers can call to request data and perform data manipulation logic. JDEBASE interprets the generic APIs and converts the SQL into the appropriate statements that allow OneWorld to access the database.

Multiple databases in a distributed environment require a monitoring program to ensure database integrity. This monitoring program is referred to as a transaction monitor or a lock manager. The JDEBASE database middleware has an embedded lock manager.

### **JDEBASE Database Middleware Flow**

JDEBASE provides a set of APIs to the developer and a set of translation programs to OneWorld. The translation programs are embedded in the data source definitions. For example, suppose a data request for address master is made. The Object Configuration Manager (OCM) determines which data source contains the requested table. The data source master provides the database information. This includes the required driver, which is loaded to translate the request into the appropriate SQL statements.

JDEBASE provides the following functions:

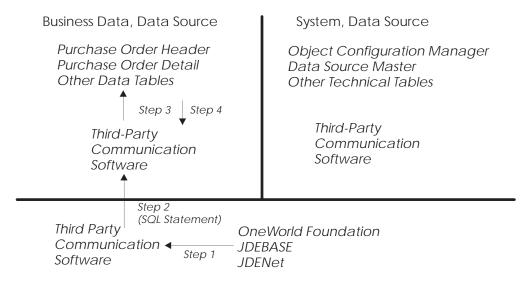
- Ability to insulate developers from platform-specific SQL coding
- Rapid development of native drivers
- Server-to-server communication
- Transaction control using a lock manager

### **Example: Database Middleware Flow**

The following explains the data-request process. For this example, the user enters search criteria for a purchase order and clicks Find.

### **Database Middleware Flow**

#### **Data Servers**



Workstation

OneWorld accommodates any number of data servers. This illustration shows only two.

- . 1 OneWorld sends a data request to JDEBASE on the workstation. The request includes the form's data structure and any values needed to locate the record.
- . 2 JDEBASE does the following:
  - Builds data structures from the application structures, creates the
    actual SQL statement or equivalent commands, and passes the SQL
    statement to the third-party communication software, which resides
    on the workstation. Examples of third-party communication software
    are IBM Client Access, Microsoft ODBC, and Oracle SQLNET.
  - Manages the physical connections to the database.
  - Manages optimal fetch algorithms.
  - Performs all binding.
  - Passes result codes back to the application. Errors are logged in the jde.log.
- 3 The third-party communication software on the workstation passes data to the third-party communication software on the server. The server then

- accesses the table and returns the data to the third-party communication software.
- . 4 Finally, the third-party communication software passes data back to the JDEBASE and the OneWorld Foundation processes.

## **Data Replication**

Data replication is the process of replicating (copying) data from server to server or from server to workstation. Data replication is sometimes an effective way to increase the performance of your network because you can replicate data to a location close to the processing logic. For example, replicating data to a departmental server greatly reduces overall network traffic for table validation. A reduction in network traffic is particularly important in a wide area network (WAN) environment.

This section defines the concepts of replicating data across your enterprise and how to use the Data Replication (P98DREP) application to set up your replicated data.

This section contains the following topics:	
☐ Understanding data replication	
☐ Setting up data replication	
☐ Replicating data dictionary changes	

## **Understanding Data Replication**

You can replicate data from a central location, such as an enterprise server, to workstations or servers to increase the performance of your network. For example, you can greatly reduce network traffic in a wide area network (WAN) environment by replicating data to a workgroup server. Data replication requires you to thoroughly plan how you want the configurable network computing environment to work. You must determine the following:

- Which replication engine you should use.
- What level of support you will require to administer the chosen replication facilities.
- What tables you should replicate and where the replicated tables should reside.

The first decision usually involves whether to use the OneWorld replication facilities, the tools provided by the database vendor, or the tools provided by a third-party vendor. Each solution offers unique advantages. If you choose the replication tools in OneWorld or the replication tools of the database vendor, such as Oracle or SQL, you receive the benefit of having the replication tools integrated into the software or the database administration functions respectively. If you choose a third-party replication tool, you can meet cross-vendor replication needs.

Regardless of the data replication tools that you choose, the issue of support is important to your solution. The allocation of adequate administrative resources to monitor data replication in any production environment is critical. You must preserve the integrity of replicated data and learn error recovery methodologies.

Data replication provides many advantages but also adds many responsibilities. When you use replication facilities, you need to designate an administrator to regularly monitor the replication process to maintain data integrity. When you compare the advantages of data replication to the large amount of maintenance required, consider the following benefits:

• Data replication allows store and forward transactions. If you replicate all the data necessary for a user to enter transactions on a workstation, such as a laptop, then that user can enter transactions while the workstation is disconnected from the enterprise servers. See *Working with Store and Forward Processing* in the *CNC Implementation Guide* for information about using store and forward processing.

Data replication improves network performance. You can improve
performance by replicating static tables (such as the data dictionary, user
defined codes, and menus) to the workstation. This reduces the strain on
the servers by requiring less data retrieved, and allowing the workstations
to handle the table input and output.

	hapter discusses the following data replication topics:
	Concepts of data replication
	Planning a replication strategy
	Understanding pull replication
	Understanding just-in-time replication
	Understanding push replication
	Workgroup servers on a wide-area network
	Servers as both publishers and subscribers and chain replication
	Selective replication using table conversion
Composite of	Data Danii atian
Concepts of	Data Replication
You sl	nould become familiar with the following concepts and terminology of eplication:
You sl data re	nould become familiar with the following concepts and terminology of
You sl data re	nould become familiar with the following concepts and terminology of eplication:
You sl data re	nould become familiar with the following concepts and terminology of eplication:  What is a published table and a publisher machine?
You sl data re	nould become familiar with the following concepts and terminology of eplication:  What is a published table and a publisher machine?  What is a replicated table and a subscriber machine?
You sl data re	mould become familiar with the following concepts and terminology of eplication:  What is a published table and a publisher machine?  What is a replicated table and a subscriber machine?  What is the data replication change log?
You sl data re	nould become familiar with the following concepts and terminology of eplication:  What is a published table and a publisher machine?  What is a replicated table and a subscriber machine?  What is the data replication change log?  What is the data replication pending change notifications table?
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### What is a Published Table and a Publisher Machine?

A published table is the central copy of a table that you want to replicate to other machines. A publisher is the server responsible for the published table. The Data Replication Publisher table (F98DRPUB), which resides in the system data source, identifies all of the published tables and the publishers associated with those tables in the enterprise. When you replicate header-detail type files, you should configure replication to work with the files as a set. Information in the Data Replication Publisher table includes:

- The name of the published table
- The data source where the published table resides
- The name of the machine that serves as the publisher
- An Enable/Disable flag

### What is a Replicated Table and a Subscriber Machine?

A replicated table is the copy of the published table that resides on the subscriber. A subscriber is the machine, whether server or workstation, that you designate as responsible for the replicated copy of a published table. The Data Replication Subscribers table (F98DRSUB), which resides with the Data Replication Publisher table (F98DRPUB) in the system data source, identifies all of the subscriber machines for each published table. A published table can have multiple subscribers. Information that resides in the Data Replication Subscribers table includes:

- The name of the subscriber machine
- The name of the published table that you replicate on the subscriber
- The data source where the replicated table resides
- The replication type for the replicated table: push, pull, just-in-time replication (JITR), or none (for third-party replication products)
- An In-Synch flag
- An Enable/Disable flag

In special cases, the subscriber can be the same machine as the publisher. An example of such a case is when you configure a database-only workgroup server across a WAN. The enterprise server acts as both the publisher and the subscriber for processing; however, while the published table resides on the enterprise server, the subscribed table resides on the workgroup server.

### See Also

• Push Replication for Database-Only Workgroup Servers

### What is the Data Replication Change Log?

When you change data in a published table, the publisher creates a record in the Data Replication Change Log (F98DRLOG). The record contains the nature of the change, such as add, change, or delete, and a copy of the actual changed data. The record also contains the counter of subscribers that require notification of the change. Each time that a subscriber successfully receives notification, OneWorld removes the value for the subscriber in the counter. Each server that you set up as a publisher must contain the Data Replication Change Log in the server map data source. This setup ensures that the subscribers of this publisher can receive any pending changes to the published table.

### What is the Data Replication Pending Change Notifications Table?

The Data Replication Pending Change Notifications table contains a record for each subscriber who needs to update the replicated information. A header-detail relationship exists between the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN). The table contains a status flag that indicates whether the publisher sent a notification message to a given subscriber. When the subscriber acknowledges receipt of the notification, OneWorld deletes the records in the Data Replication Pending Change Notifications table and removes the value for the subscriber in the counter in the Data Replication Change Log. When all deliveries for the change have been acknowledged, OneWorld deletes the associated header record in the Data Replication Change Log. Each server that you set up as a publisher must contain the Data Replication Pending Change Notifications table in the server map data source.

### What is the In-Synch Flag?

The In-Synch flag indicates whether the data of the replicated table on a subscriber matches the published table on the publisher. When you add a new subscriber, the flag defaults to "N", which means that the table is out of synch. This setting causes OneWorld to copy the published table to the subscriber, which provides a match at the start of the replication process for that table. Unless you do so for a specific reason, do not change the In-Synch flag.

Any time that you sign on to OneWorld from a subscriber workstation with tables that are not synchronized with the published tables, a message appears to notify you that the subscriber is not synchronized with the publisher. This notification gives you the opportunity to copy the table to your machine. If you copy the table, the replication process automatically changes the subscriber record so that the In-Synch flag setting is "Y".

The synchronization process works differently when server to server, or push replication, exists. Push replication does not use the In-Synch flag. When you set up data replication, you must ensure that the publisher tables and the subscriber tables match. If the tables do not match, you must manually copy the publisher table to the subscriber.

When a workstation subscriber is out of synchronization, the machine is effectively disabled; however, the workstation still receives the notification message each time that a OneWorld session starts on the machine.

### What is Forced Synchronization?

You can set up the workstation to perform a forced synchronization of all replicated tables. A forced synchronization means that the publisher updates all replicated data regardless of the messages that exist in the Data Replication Change Log table (F98DRLOG) or the Data Replication Pending Change Notification table (F98DRPCN). Generally, the workstation performs a forced synchronization the first time you sign on to OneWorld. This synchronization occurs because the following setting does not appear in the jde.ini file:

[REPLICATION]
ForcedSync=forced synchronization 0/1 (off/on)

The setting does not appear if you do not include the setting in the jde.ini file on your deployment server. After OneWorld performs the forced synchronization on the workstation, OneWorld writes a ForcedSync entry to the workstation jde.ini file with forced synchronization turned off. You can manually force synchronization of all replicated tables by changing the setting from 0 (off) to 1 (on). You can also perform a forced synchronization the first time that you run OneWorld on a workstation by writing the ForcedSync entry into the workstation jde.ini file with a value of 1. For example, system administrators might force synchronization if they suspect data corruption in any of the OneWorld data replication tables (F98DRLOG or F98DRPCN), such as missing entries for subscriber updates.

#### See Also

• Modifying the Workstation and Server jde.ini Files

### What is the Enable/Disable Flag?

This flag determines whether to enable or disable data replication. When you disable a publisher or a subscriber, you deactivate data replication for the machine. For example, when you initially set up data replication, you create multiple publisher and subscriber records; however, you should not enable the records until your replication configuration is completely set up.

The publisher does not record modifications to a disabled published table in the Data Replication Change Log (F98DRLOG) or the Data Replication Pending Change Notifications table (F98DRPCN). When you change an enabled published table with some enabled subscribers and some disabled subscribers, the publisher logs the modifications in the Data Replication Change Log, but the publisher only enters records for enabled subscribers in the Data Replication Change Notifications table.

### **Caching Replication Information**

When either a server or a workstation starts OneWorld, OneWorld reads the Data Replication Publisher table (F98DRPUB) and caches the table locally. OneWorld also reads the Data Replication Subscribers table (F98DRSUB) and caches subscriber records on the machine. By locally caching this information, the database management component of OneWorld middleware (JDEBASE) can detect and manage modifications to published tables. You should point users, even WAN users, to a single copy of F98DRPUB and F98DRSUB in the main enterprise server database.

Workstations and servers cache information about published tables and subscribers when a OneWorld session begins. This cached data is critical to the detection of modifications to published tables. The system administrator must closely monitor the status of replicated data to maintain data integrity across the enterprise. You can refresh the cache on publisher hosts from the Work with Publishers form using the Refresh Hosts option on the Form menu. Also, internal user organization procedures should require that you restart OneWorld on all machines in the enterprise when you change the Data Replication Publisher table (F98DRPUB) and the Data Replication Subscribers table (F98DRSUB).

When JDEBASE detects a change to a published table, the publisher of the changed table receives a message. The publisher then makes the appropriate entries in the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN) to notify the subscribers of this table.

### Planning a Replication Strategy

When you plan the deployment of OneWorld tables in a distributed data environment, you should consider that OneWorld applications might access multiple database tables during application processing. For example, an application might access data from one table that requires data from another table. These application table dependencies require you to replicate certain tables together. If you split associated tables across multiple locations, you will decrease the performance of your distributed configuration. Also, you should replicate some groups of tables together for functional and performance reasons.

Some limitations exist in OneWorld for distributed data and joined business views that span multiple databases. This limitation impacts any application that uses these business views.

OneWorld bases joins on the mappings of individual tables regardless of the location of the tables. JDB database middleware (JDEBASE) performs cross data source join operations.

**Important:** A critical part of your implementation strategy is determining whether the replication of specific joined tables benefits your enterprise. Be sure to make this determination early in the implementation process, for example, during the Conference Room Pilot (CRP).

### **Tables Suitable for Replication**

This topic lists groups of tables that you can replicate to improve performance in distributed and WAN environments.

### System Tables

System tables reside in the System data source. Typically, client memory caches system tables, so OneWorld accesses these tables only at signon; however, you might replicate certain system tables to improve the signon performance of clients in distributed and WAN environments.

Use caution if you replicate system tables, because the requirements for system table replication are specific to each individual enterprise. The CRP should highlight the tables that your enterprise requires you to replicate.

#### **Constants Tables**

Constants tables contain system and application constants specific to an application, such as information specific to the general ledger, or generally applicable to all applications, such as automatic accounting instructions (AAIs).

You must map all replicated constants tables to the same location. The following table lists examples of constants tables that you can replicate in distributed and WAN environments:

Table	Description
F0007	Work Day Calendar
F0008	Date Fiscal Patterns
F0009	General Constants Tables
F0010	Company Constants Tables

Table	Description
F0012	Automatic Accounting Instructions (AAIs) Master
F0013	Currency Codes
F0014	Payment Terms
F00141	Advanced Payment Terms
F0015	Currency Exchange Rates
F00151	Currency Exchange Rates (F0015 Header)
F0022	Tax Rules
F0025	Ledger Type Master File
F3009	Job Shop Manufacturing Constants
F40070	Preference Master
F40073	Preference Hierarchy
F4008	Tax Areas
F4009	Distribution/Manufacturing Constants
F40095	Default Locations/Printers
F40203	Order Activity Rules
F40205	Line Type Control Constants
F4095	Distribution/Manufacturing – AAI Values
F41001	Inventory Constants
F41003	Unit of Measure Standard
F98101	Imaging Constants

### **Master Tables**

OneWorld application developers determine which tables are master tables. You must map all master tables to the same location. Because of the volume of data that these tables contain and the number of changes that these tables undergo, master tables are "non static" or not suitable for replication using OneWorld replication tools. However, if you replicate these tables using native database or third-party replication tools, you can improve the performance of distributed environments and WAN environments.

The requirements for system table replication are specific to each individual enterprise. The CRP should highlight the tables that your enterprise requires you to replicate.

### **Language Support Tables**

The OneWorld architecture accommodates multiple languages. OneWorld assigns all users a language preference key within their user profiles. The language key is a two-character field that determines the language for OneWorld forms and reports. Only specific tables contain a language key.

You must map all language tables to the same location. For reduced administration and increased security, J.D. Edwards suggests that you replicate language tables to workgroup servers in distributed environments and WAN environments.

The following table lists all the language-enabled tables in OneWorld:

Table	Description
F0004D	User Defined Code Types – Languages <sup>1</sup>
F0005D	User Defined Codes – Languages <sup>1</sup>
F0006D	Business Unit Alternate Description Master <sup>2</sup>
F00090D	Supplemental Database Language Preference <sup>2</sup>
F0012D	AAI Alternate Description Master
F0083	Menu Text Override File
F00921	Menu Path File
F0901D	Account Master Alternate Description <sup>2</sup>
F4101D	Item Master – Alternative Description <sup>2</sup>
F5192D	Supplier Analysis Alternate Language Description <sup>2</sup>
F9202	Data Field Display Text
F9203	Data Item Alpha Descriptions
F98306	Processing Option Text
F98750	Forms Design Aid Text Information
F98760	Report Design Aid Text Information

#### **User Defined Code Tables**

OneWorld attaches user defined codes (UDCs) to data items using the data dictionary and sometimes the Report Design Tool (RDA). These codes list the valid values for a data item. English versions of user defined codes reside in the F0004 and F0005 tables. See *Language Support Tables* for information about language-enabled UDC tables, such as F0004D and F0005D.

In distributed and WAN environments, you can replicate all UDC tables to a workgroup server.

**Important:** If you replicate UDC tables, you must replicate the tables together. Do not separate these tables.

The following table lists the UDC tables available for replication:

Table	Description
F0004	User Defined Code Types
F0005	User Defined Codes
F0004D	User Defined Code Types – Languages
F0005D	User Defined Codes – Languages

#### Menus

You can replicate all menus in OneWorld. You must map all menu tables to the same location. In distributed environments and WAN environments, you can replicate these tables to a workgroup server.

**Important:** If you replicate menu tables, you must replicate the tables together. Do not separate these tables.

The following table lists the menu tables available for replication:

Table	Description
F0082	Menu Master File

<sup>&</sup>lt;sup>1</sup> This table is also considered a UDC table. This table must be replicated as a group with F0004 and F0005.

<sup>&</sup>lt;sup>2</sup> This is a OneWorld application language table and it should be replicated as a group with the F98\* tools language tables.

Table	Description
F00821	Menu Selections File
F0083	Menu Text Override File
F0084	Menu Path File

**Note:** You should build the following tables at the WAN site using the Build Menu Word Search Master Table (R00825) batch application. Do not replicate these tables; however, you should point workstation OCM mappings for these tables to the workgroup server.

- Menu Word Search Master Table (F00825)
- Menu Word Search Occurrences File (F00826)

### **Tables Unsuitable for Replication**

The following table lists OneWorld tables that you cannot replicate using OneWorld replication tools:

Group	Comment
Generic Text (GT) tables	As a general rule, you cannot replicate tables containing Generic Text using the OneWorld replication tool, although you can consider using third-party tools. The following list provides examples of these tables:  • GT92002 Data Dictionary – Glossary Information
System application tables	Only one copy of the next number tables, F0002 and F00021, can exist in any OneWorld environment. These tables must reside on a database server or an enterprise server. You cannot replicate these tables to a workgroup server or to an application server. The following list provides examples of these tables:
	<ul> <li>F0002 Next Numbers – Automatic</li> <li>F00021 Next Numbers by Company/Fiscal Year – Auto</li> </ul>

Group	Comment
System tables	Typically, OneWorld system programs, as opposed to application programs, use system tables. The system tables reside in the System data source. The following list provides examples of these tables:
	<ul> <li>F98701 Next ID Master</li> <li>F98950 User Overrides</li> <li>F98DRLOG Data Replication Change Log</li> <li>F98DRPCN Data Replication Pending Change Notification</li> <li>F98OWSEC OneWorld Security</li> </ul>
Transaction or balance tables	J.D. Edwards does not recommend using the OneWorld data replication tools to replicate transaction or balances tables or any other tables that change frequently. The replication of these tables requires a significant administration effort and exposes your enterprise to data integrity issues. The following list provides examples of these tables:
	<ul> <li>F0902 Account Balances File</li> <li>F0911 Account Ledger</li> <li>F4211 Sales Order Detail</li> <li>F4311 Purchase Order Detail</li> </ul>
Application worktables	Application worktables are temporary tables unique to an application session. Occasionally, OneWorld uses these tables instead of temporary cached memory. The following list provides examples of these tables:
	<ul> <li>F40UI801 Generic Error Table</li> <li>F42UI01 Sales Order Header Cache File (MBF)</li> <li>F42UI11 Sales Order Detail Cache File (MBF)</li> </ul>

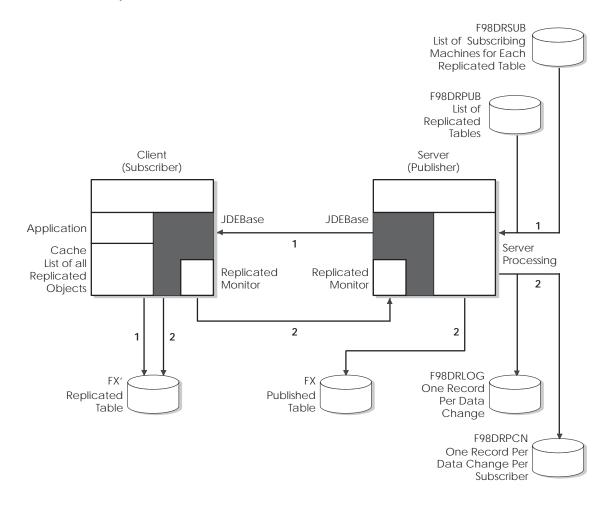
### **Understanding Pull Replication**

Pull replication is the recommended type of replication for workstations. A subscriber using pull replication must be a machine that runs OneWorld.

When you start OneWorld on a subscriber that uses pull replication, the subscriber machine retrieves, or pulls, any pending changes queued in the Data Replication Pending Change Notifications table (F98DRPCN) for that subscriber. Based on records retrieved from F98DRPCN and the corresponding entries in the Data Replication Change Log (F98DRLOG), the subscriber updates the replicated tables.

The following graphic illustrates pull replication processing:

#### **Pull Replication**



#### (1) When you start a subscriber:

At startup, the subscriber copies all replicated table information that resides in the Data Replication Publisher table (F98DRPUB) and subscription information for the subscriber contained in the Data Replication Subscribers table (F98DRSUB) and caches the information. Also, the subscriber processes any undelivered replication messages that reside in the Data Replication Pending Change Notifications table (F98DRPCN). The subscriber updates the replicated tables when it processes these messages.

### (2) When you change a published table:

If the subscriber modifies a replicated table, the Replication Monitor routine of JDEBASE detects the change and triggers a process that modifies the published table. JDEBASE sends a synchronous message to the publisher, which responds by updating the Data Replication Change Log (F98DRLOG) with the changed data and the Data Replication Pending Change Notifications table (F98DRPCN) with the list of subscribers that also need the change.

# Maintaining Data Integrity Between Subscribers and Publishers for Pull Replication

If the subscriber is a workstation, replicated tables reside in the Microsoft Access database on the workstation. When you change the data in the local subscriber tables, OneWorld automatically changes the data in the published tables on the server. This process is identical to the process used for just-in-time replication (JITR). The following procedure explains this process.

### To maintain data integrity between subscribers and publishers

- 1. The subscriber sends a message to the publisher of the changed table.
- 2. The publisher creates the appropriate entries in the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN).
- 3. The publisher replicates the changes to all other subscribers, based on the entries in F98DRLOG and F98DRPCN.

### **Understanding Just-In-Time Replication**

Just-in-time replication (JITR) is another method of replication that can be used when the subscriber is a workstation. The system processes any changes and deletions that a user does not need during an active session in accordance with pull replication when the user signs on to a workstation.

Just-in-time replication works in conjunction with the following OneWorld processes:

#### **Process**

#### Description

## Validating a user defined code field

If a search for a record in the local replicated table fails, OneWorld automatically performs a second search in the published table. If the record resides in the published table, the publisher immediately updates the record in the replicated table.

For example, assume that a user enters a sales order and types in a new line type. When the user exits the field, OneWorld validates the line type against the local copy for that table. If the data source does not contain the new line type, OneWorld checks the data source of the published table. The validation succeeds and the replication process copies the new line type to the local replicated table.

#### Using visual assist

Visual assist always looks to the published table's data source. When using visual assist, OneWorld reads the data from the published table. If you select a value that does not exist in the replicated table, OneWorld copies the data to the data source of the subscriber.

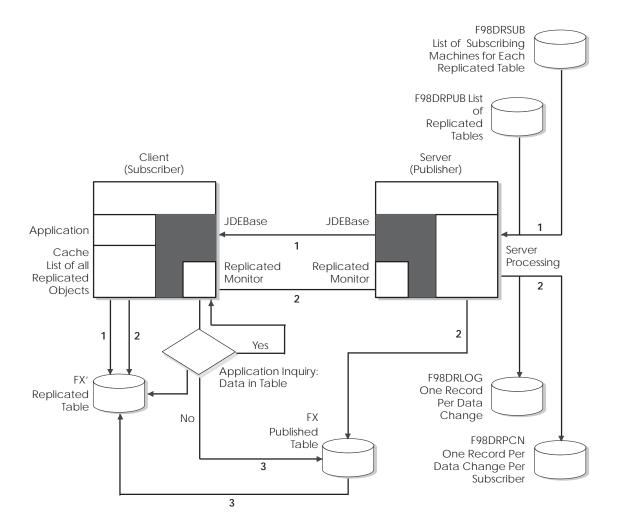
For example, assume a user enters a sales order and uses visual assist for the unit of measure field. When you set up just-in-time replication for a table, OneWorld always looks to the published table to display the valid values for that table. Selecting the new unit of measure causes just-in-time replication to copy the value from the published table to the subscriber table.

#### **Data dictionary**

By default, data dictionary and global table specification files on a workstation use JITR for data dictionary replication. See *Replicating Data Dictionary Changes* in this guide.

The following graphic illustrates just-in-time replication processing:

#### Just-In-Time Replication



### (1) When you start a subscriber:

At startup, the subscriber copies all replicated table information that resides in the Data Replication Publisher table (F98DRPUB) and subscription information for the subscriber contained in the Data Replication Subscribers table (F98DRSUB) and caches the information. Also, the subscriber processes any undelivered replication messages that reside in the Data Replication Pending Change Notifications table (F98DRPCN). The subscriber updates the replicated tables when these messages finish processing, and OneWorld removes the respective entries from F98DRPCN. OneWorld removes the associated entries in the Data Replication Change Log (F98DRLOG) after all subscribers receive the change.

### (2) When you change a published table:

If the subscriber modifies a replicated table, the Replication Monitor routine of JDEBASE detects the change and triggers a process that modifies the published table. JDEBASE sends a synchronous message to the publisher, which responds by updating the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN).

### (3) When a workstation performs a query:

If the workstation queries a replicated table for row validation and cannot find the row, then the workstation queries the published table for the row. If the row resides in the published table, JDEBASE immediately replicates the row to the replicated table.

# Maintaining Data Integrity Between Subscribers and Publishers for JITR Replication

If the subscriber is a workstation, replicated tables reside in the Microsoft Access database on the workstation. When you change the data in the local subscriber tables, OneWorld automatically changes the data in the published tables on the server. This process is identical to the process used for pull replication. The following procedure explains this process.

### To maintain data integrity between subscribers and publishers

- 1. The subscriber sends a message to the publisher of the changed table.
- 2. The publisher updates the published table.
- 3. The publisher creates the appropriate entries in the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN).
- 4. The publisher replicates the changes to all other subscribers, based on the entries in F98DRLOG and F98DRPCN.

### **Understanding Push Replication**

Use push replication for server-to-server replication. Push replication is the most efficient method of replication and the easiest to administer. When you change a published table using push replication, the publisher immediately replicates the information on the subscriber. If the subscriber is not online, the subscriber receives the modifications using the pull method when you restart OneWorld on the subscriber.

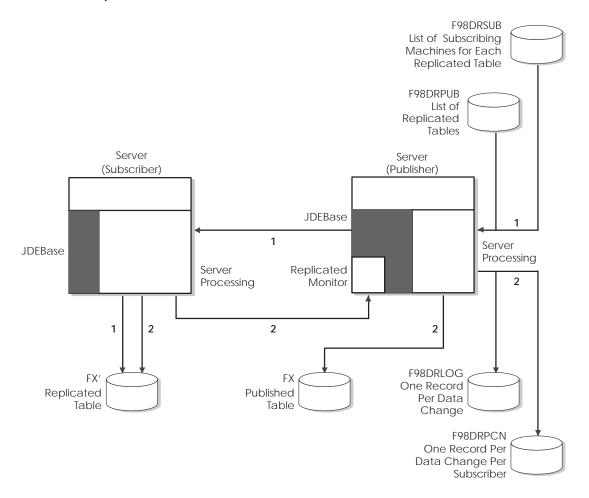
Push replication also occurs when subscriber tables change. If a valid Data Replication Publisher table (F98DRPUB) and a valid Data Replication

Subscribers table (F98DRSUB) exist in cache on the workstation making the change, OneWorld records replication changes in the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN) whenever a publisher table or a subscriber table changes.

**Note:** When a network outage prevents push replication, you must restart the subscriber to receive the modifications made to the published table. If you do not restart the subscriber, the subscriber continues to use out-of-date information.

The following graphic illustrates push replication processing:

#### **Push Replication**



### (1) When you start a subscriber:

At startup, the subscriber copies all replicated table information that resides in the Data Replication Publisher table (F98DRPUB) and subscription information for the subscriber contained in the Data Replication Subscribers table (F98DRSUB) and caches the information. Also, the subscriber processes any undelivered replication messages that reside in the Data Replication Pending Change Notifications table (F98DRPCN). The subscriber updates the replicated tables when it processes these messages.

### (2) When you change a published table:

When you change a published table, the publisher records the modification in the Data Replication Change Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN). The subscriber immediately updates the replicated tables if the subscriber is online. If the subscriber is offline, the publisher saves the message and then delivers the message when the subscriber comes back online.

### **Push Replication for Database-Only Workgroup Servers**

Workgroup servers are database servers configured to run with replicated data in distributed environments or remote WAN locations. To provide a configuration that requires low maintenance, you can deploy a database-only workgroup server rather than duplicate the complex configuration of a full-scale enterprise server. A database-only workgroup server does not run any OneWorld server code. The server only supports a database.

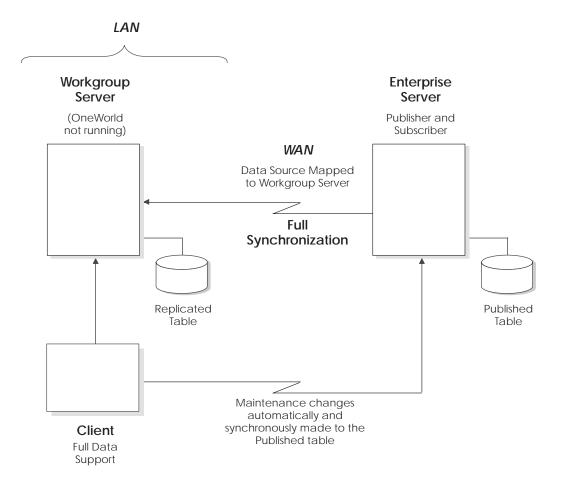
**Important:** You cannot use a workgroup server when you use an AS/400 as the publisher server. When you replicate data across platforms from an AS/400, OneWorld *must* reside on the workgroup server because JDBNet needs to run on the workgroup server for replication to occur successfully.

The method of push replication for database-only workgroup servers allows you to set up the enterprise server as both a subscriber and a publisher for the replicated tables, using the standard push methodology. However, you set up the database-only workgroup server as the subscriber data source for the replicated tables. This setup is possible without OneWorld code running on the database-only workgroup server. Push replication ensures the synchronization of the replicated tables on the database-only workgroup server with the published tables on the enterprise server.

On a local area network (LAN), you can use a database-only workgroup server, which does not run OneWorld, as a subscriber for the replication of published tables. In this configuration, an attached workstation is a nonsubscriber that points to the replicated data on the workgroup server. If the workstation changes the replicated data, the published table does not change automatically; therefore, workstations attached to subscriber workgroup servers should only use the replicated tables on the workgroup server for validation purposes, which are read only. If you need to make changes to the replicated tables, you should use a separate environment on the workstation by logging on to another environment with OCM mappings to the central published table, to update the central published table. After you update the central published table, use push replication to update the subscribing workgroup server.

The following graphic illustrates the push replication method for a database-only workgroup server:

### **Push Replication Method for Database-Only Workgroup Servers**



### **Third-Party Replication**

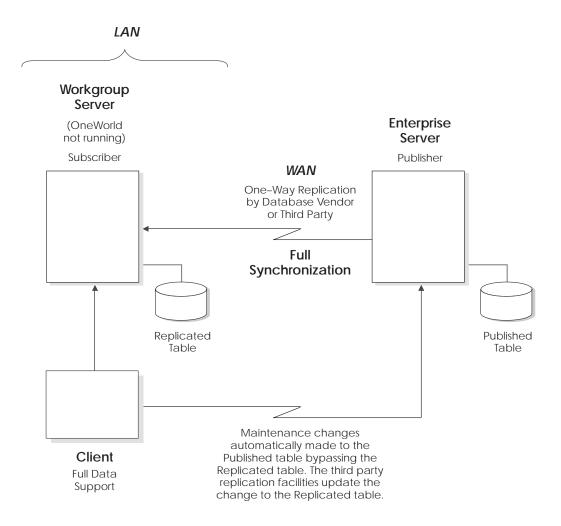
With a NON subscription type, you update data in the published table directly from the client, even though the OCM mappings for the client point to the

database-only workgroup server that subscribes to the enterprise server. This setup allows the client to access the replicated data on the workgroup server for the validation of data and perform "inserts," "updates," and "deletes" to the published table on the enterprise server. Third-party replication tools then implement replication services for the configuration.

The primary advantage to this strategy is that a separate client session is not necessary to update master copies of replicated data on the publisher. Also, you do not need to maintain a OneWorld installation on the workgroup server. This server can remain database-only. The disadvantage is that a change made to a published table might not immediately be replicated to the subscribing database-only workgroup server.

The following illustration provides an example of NON mode replication:

### NON Mode for Database-Only Workgroup Servers

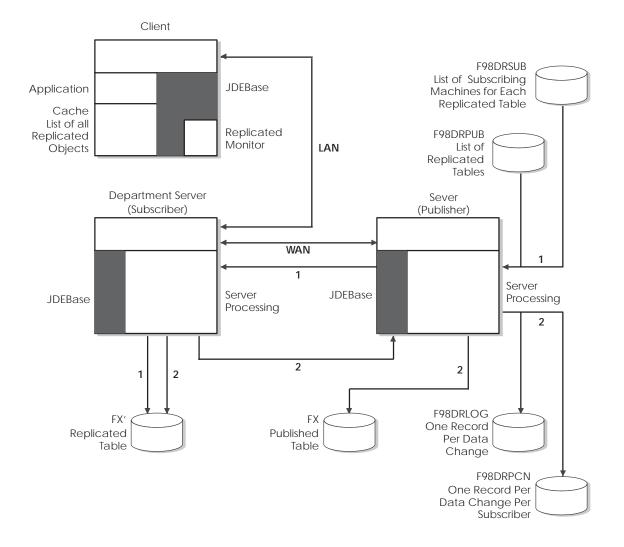


## Workgroup Servers on a Wide Area Network

In a wide area network (WAN) environment, you should consider using workgroup servers to store replicated information for users who reside in a remote location.

The following graphic illustrates a typical workgroup server set up in a WAN environment:

### Workgroup Server as Subscriber



### (1) When you start a subscriber:

At startup, the subscriber copies all replicated table information that resides in the Data Replication Publisher table (F98DRPUB) and subscription information for the subscriber contained in the Data Replication Subscribers table (F98DRSUB) and caches the information. Also, the subscriber processes any undelivered replication messages that reside in the Data Replication Pending Change Notifications table (F98DRPCN). The subscriber updates the replicated tables when it processes these messages.

### (2) When you change a published table:

When you change a published table, the publisher records the modification in the Data Replication Log (F98DRLOG) and the Data Replication Pending Change Notifications table (F98DRPCN). The subscriber immediately updates the replicated tables if the subscriber is online. If the subscriber is offline, the publisher saves the message and then delivers the message when the subscriber comes back online.

**Note 1:** The Object Configuration Manager for the workstation points to replicated data on the workgroup server.

**Note 2:** When you change replicated data on a workstation in a WAN environment, the publisher does not record the modifications. If you want to update replicated data, you should start a separate session of OneWorld to directly change the published table.

### Servers as Both Publishers and Subscribers and Chain Replication

The J.D. Edwards replication facilities support the capability to configure a server as both a publisher and a subscriber. You can also configure your enterprise for chain replication. Chain replication means that you set up a server to subscribe to a published table; that same server is a publisher to another subscriber.

**Caution:** Chain replication greatly complicates data replication, so you must carefully design and manage a configuration that uses chain replication. OneWorld supports one-way push replication technology; therefore, to maintain data integrity you should avoid modifications to replicated data in the middle of a chain. In a configuration that uses chain replication, you should make all changes to replicated data at the beginning of the chain to ensure integrity.

### **Selective Replication Using Table Conversion**

You cannot selectively replicate data. For example, if you want to replicate only the Address Book records with a search type of C and a specific category code, you need to use table conversion to perform the replication. You control the replication by manually submitting a table conversion, so you should use this replication method sparingly. You might consider using table conversion to replicate data in the following situations:

- Infrequent replication of data for a group of tables
- Replication of records based on specific data selection
- Replication of transaction data required by store and forward processing

**Note:** You should only use table conversion to replicate data in isolated situations that do not require the synchronized replication of data, as in real-time data visibility.

### **Setting Up Data Replication**

Use the Data Replication application to set up specific tables as publishers and subscribers. This method of replication, which is integrated into OneWorld middleware, automatically detects changes to publishers and notifies the subscribers of the changes, or updates subscribers as the changes are used.

With a coexistence configuration, if change detection is important to you, do not modify publisher tables using WorldSoftware programs unless you set up subscribers with just-in-time replication (JITR). J.D. Edwards integrated the change detection into the OneWorld middleware, which will not detect changes made by WorldSoftware programs.

The following list provides the steps for data replication setup:

- Create publishers
- Create subscribers

Before you set up data replication, it is important to understand the size of your organization so you can devise an appropriate plan, both for now and for the future. The plan should answer the following questions:

- Can I follow any of the case studies to help me organize the data replication flow? If so, which one?
- Which tables do I want replicated and why?
- What type of replication should each table use?
- Who is going to be the data replication administrator?

When you have answered these questions you can set up data replication for a conference room pilot (CRP) environment where any issues are resolved among a few selected users. After a successful trial has been accomplished, you can implement replication throughout the enterprise.

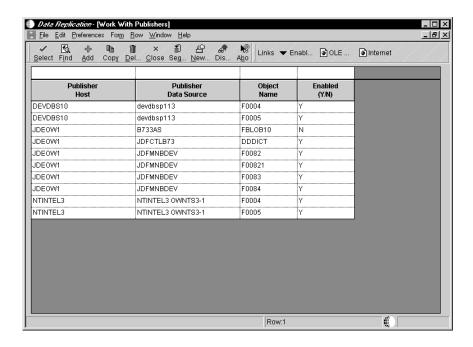
This topic contains the following:	
☐ Working with publishers	
☐ Working with subscribers	
☐ Enabling and disabling publishers and subscribers	
☐ Creating publishers and subscribers using a batch process	

OneWorld Xe (09/00) 3–27

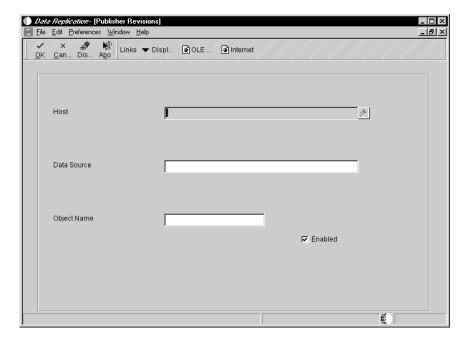
☐ Copying a publisher and its associated subscribers
☐ Setting up the environment for data replication
☐ Setting up forced synchronization
☐ Reviewing the replication logs
After you have seen the details of the application, you will be presented with three models for data replication and then an example plan for using it in your production environment.
Working with Publishers
This topic explains how to add and delete publishers. After you have added a publisher, you can add subscribers, as explained in this section. This topic contains the following procedures:
☐ Adding a publisher
☐ Deleting a publisher
To add a publisher

Use this application to add a publisher table (F98DRPUB). The publisher table identifies all of the tables that you want replicated.

1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).



2. On the Work With Publishers form, click Add.



- 3. On the Publisher Revisions form, complete the following fields:
  - Data Source
  - Object Name

The Host field automatically populates with the server machine name for the server associated with the data source in the data source definition.

The 30-character name of the data source where the published object resides.
The OneWorld architecture is object based. This means that discrete software objects are the building blocks for all applications, and that developers can reuse the objects in multiple applications. Each object is stored in the Object Management Workbench. Examples of OneWorld objects include:  • Batch Applications • Interactive Applications • Business Views • Business Functions • Business Functions • Event Rules • Media Object Data Structures
The purpose of disabling a publisher or subscriber is to turn off replication for that publisher or subscriber without deleting the record. For example, suppose you are preparing to activate replication. You will create many publisher and subscriber records, but do not want the records enabled until the day you activate replication. Disabling a publisher effectively disables all its subscribers, as replication is completely turned off for the publisher table. Changes made to a publisher table will not be logged in the Data Change Log nor the Pending Change Notification Log. A publisher may have some subscribers enabled and other subscribers disabled. Changes to the publisher table will be stored in the Data Change Log. Only subscribers that are enabled who have not received the changes will have records in the Pending Change Notification.  **Form-specific information**  This flag determines whether data replication is enabled or disabled.

### To delete a publisher

You cannot modify a publisher. Instead, you must delete it, and create a new one.

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher and click Delete.

This deletes the publisher along with any subscribers.

## **Working with Subscribers**

This topic explains how to add, synchronize, and delete subscribers. This topic contains the following:

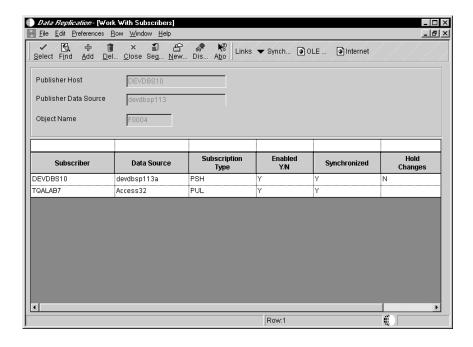
- ☐ Adding a subscriber
- ☐ Synchronizing and unsynchronizing subscribers
- ☐ Deleting subscribers

#### Adding a Subscriber

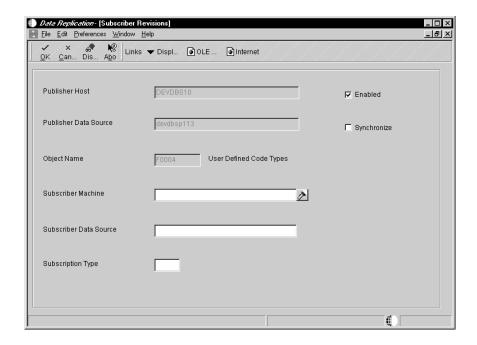
Use this application to add subscriber tables.

## To add a subscriber

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher and then choose Subscribers from the Row menu.



3. On the Work With Subscribers form, click Add.



- 4. On the Subscriber Revisions form, complete the following fields:
  - Subscriber Machine

If the subscriber is a departmental server, you must type the server's machine name into this field. Departmental servers do not appear on the visual assist Machine Search & Select form.

- Subscriber Data Source
- Subscription Type
- 5. Choose whether you want the following flags turned ON or OFF:
  - Enabled
  - Synchronize
  - Hold Changes

This field only appears after you enter a departmental server into the Subscriber Machine field.

When you add a subscriber record, it is automatically set up as not synchronized.

Field	Explanation			
Subscriber Machine	The name of the network server where data resides or where objects can be executed.			
	Form-specific information			
	On this form, Subscriber Machine is the machine name that is set up to receive replicated changes for a published table. A subscriber is a combination of the machine and a data source on that machine.			
Subscriber Data Source	A 30-character name of the data source where the subscribed object resides.			
Subscription Type	Subscription Type identifies the type of replication performed for a subscriber. Server subscribers must be set up as Push replication. Workstation subscribers can be set up as Pull replication or Just-in-time replication (JITR).			
	Push subscribers receive changes immediately. If the change cannot be replicated to a server because OneWorld is not running, the message is stored until OneWorld on the server subscriber is restarted, at which time the server pulls the change.			
	Pull subscribers receive the change the next time they sign on to OneWorld. JITR subscribers receive new records 'just in time.' However, deletions and updates are replicated the next time the subscriber machine signs onto OneWorld.			
Enabled	This flag determines whether data replication is enabled or disabled. The purpose of disabling a subscriber is to turn off replication for that subscriber without deleting the record. For example, suppose you are preparing to activate replication. You will create many publisher and subscriber records, but do not want the records enabled until the day you activate replication. A publisher may have some subscribers enabled and other subscribers disabled. Changes to the publisher table will be stored in the Data Change Log. Only subscribers that are enabled who have not received the changes will have records in the Pending Change Notification.			
Synchronize	Checking this field will sychronize the object. If this field is not checked then the object is not in synch.			
Hold Changes	Causes all changes to a published table to be held for this server subscriber. When the server subscriber is ready to receive the changes, the Hold Changes flag should be turned off. Then when OneWorld on the server is restarted, all changes that have been held for this subscriber are pulled. Hold Changes is not necessary for workstation subscribers.			

OneWorld Xe (09/00) 3–33

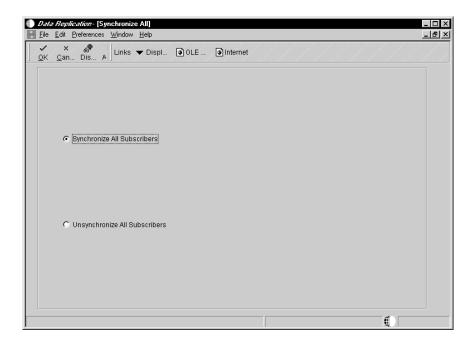
### Synchronizing and Unsynchronizing Subscribers

There are several different methods available to synchronize or unsynchronize subscribers depending on the outcome wanted. All methods involve setting the In Synch flag for the subscribers. The In Synch flag indicates whether a subscriber and a publisher table match. This topic contains the following:

- Synchronizing and unsynchronizing all subscribers
- Synchronizing and unsynchronizing subscribers of one publisher
- Synchronizing and unsynchronizing selected subscribers

## To synchronize and unsynchronize all subscribers

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose Synchronize All from the Form menu.



- 3. On the Synchronize All form, choose one of the following options, and click OK:
  - Synchronize All Subscribers

The In Synch flag for all of the subscribers for all publishers changes to Y, meaning OneWorld considers those subscribers to be in synch with their associated publisher.

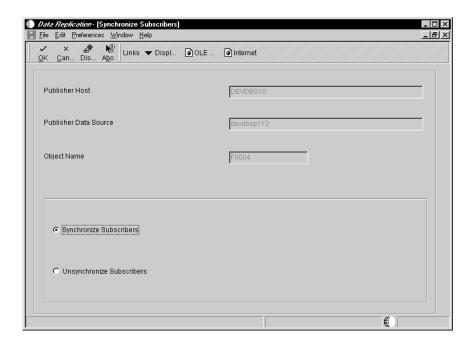
Unsynchronize All Subscribers

The In Synch flag for all of the subscribers for all publishers changes to N, meaning that OneWorld considers those subscribers to be *out* of synch with their associated publisher. The next time that a user signs on, OneWorld tells the user that the table is out of synch. If the user chooses to synchronize the table, OneWorld copies it and switches the In Synch flag to Y.

When initially adding a subscriber, do not change the In Synch flag unless you are certain that the publisher and subscriber tables are identical.

## To synchronize and unsynchronize subscribers of one publisher

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher, and choose Synchronize from the Row menu.



- 3. On the Synchronize Subscribers form, choose one of the following options, and click OK.
  - Synchronize Subscribers

The In Synch flag for all of the subscribers of the publisher that you chose changes to Y, meaning OneWorld considers those subscribers to be in synch with their associated publisher.

OneWorld Xe (09/00) 3–35

#### • Unsynchronize Subscribers

The In Synch flag for all of the subscribers of the publisher that you chose changes to N, meaning that OneWorld considers those subscribers to be *out* of synch with their publisher. The next time that a user signs on, OneWorld will tell the user that the table is out of synch. If the user chooses to synchronize the table, OneWorld will copy it and switch the In Synch flag to Y.

When initially adding a subscriber, do not change the In Synch flag unless you are certain that the publisher and subscriber tables are identical.

## To synchronize and unsynchronize selected subscribers

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, highlight a publisher, and from the Row menu, choose Subscribers.
- 3. On the Work With Subscribers form, choose one or more subscribers, and from the Row menu, choose Synchronize.

The Synchronized field toggles between Y and N for synchronized and unsynchronized.

## **Deleting Subscribers**

The following explains how to delete subscribers:

- Delete all subscribers
- Delete individual subscribers

## To delete all subscribers

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher, and from the Row menu, choose Delete Subscribers.

OneWorld deletes all of the subscribers for that publisher, but the publisher record remains.

#### To delete individual subscribers

1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).

- 2. On the Work With Publishers form, choose a publisher, and from the Row menu, choose Subscribers.
- 3. On the Work With Subscribers form, choose one or more subscribers, and click Delete.

## **Enabling and Disabling Publishers and Subscribers**

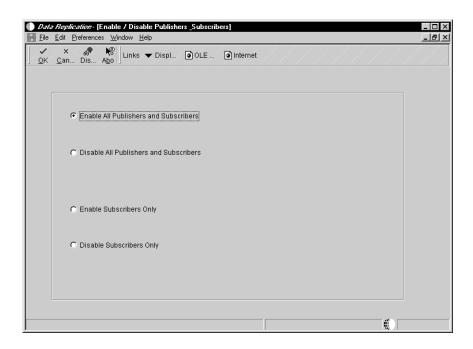
You can enable and disable data replication for publishers and subscribers. This topic contains the following:

- Enabling and disabling all publishers and subscribers
- Enabling and disabling subscribers of one publisher
- Enabling and disabling selected subscribers

## To enable and disable all publishers and subscribers

You can enable and disable data replication for all *existing* publishers and subscribers, or enable and disable the data replication for all subscribers.

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, from the Form menu, choose Enable/Disable.



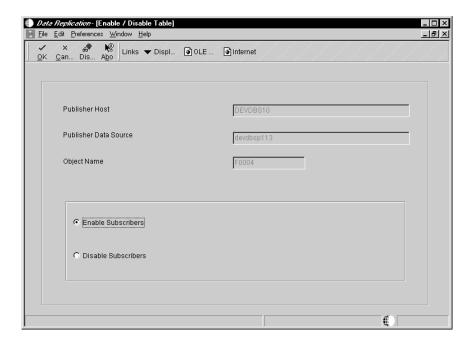
OneWorld Xe (09/00) 3–37

- 3. On the Enable / Disable Publishers & Subscribers form, choose one of the following and click OK:
  - Enable All Publishers and Subscribers
  - Disable All Publishers and Subscribers
  - Enable Subscribers Only
  - Disable Subscribers Only

## To enable and disable subscribers of one publisher

You can enable and disable data replication for subscribers of a specific publisher.

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher, and from the Row menu, choose Enable/Disable Subs.



- 3. On the Enable / Disable Table form, choose one of the following and click OK:
  - Enable Subscribers
  - Disable Subscribers

#### To enable and disable selected subscribers

You can enable and disable data replication for selected subscribers of a specific publisher.

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher, and from the Row menu, choose Subscribers.
- 3. On the Work With Subscribers form, choose one or more subscribers, and from the Row menu, choose Enable/Disable.
- 4. On the Enable / Disable Table form, choose one of the following and click OK:
  - Enable Subscribers
  - Disable Subscribers

Field	Explanation
Enable Subscribers	This flag determines whether data replication is enabled or disabled. The purpose of disabling a subscriber is to turn off replication for that subscriber without deleting the record. For example, suppose you are preparing to activate replication. You will create many publisher and subscriber records, but do not want the records enabled until the day you activate replication. A publisher may have some subscribers enabled and other subscribers disabled. Changes to the publisher table will be stored in the Data Change Log. Only subscribers that are enabled who have not received the changes will have records in the Pending Change Notification.

## Creating Publishers and Subscribers Using a Batch Process

This topic explains how to set up a publisher with subscribers using the Create Publisher and Subscriber Records (R00960) batch process. This program simplifies replication setup by allowing you to create hundreds of subscriber records with one process.

This batch process reads the Machine Identification (F00960) table, which stores information about each OneWorld workstation. From information that you type into the processing option on how to create a publisher, you can create a publisher record and subscriber records for each workstation in the table. If you do not want all workstations set up as subscribers, then use data selection to create records for a particular set of workstations. Remember that you should normally create the publisher and its subscribers as disabled and not

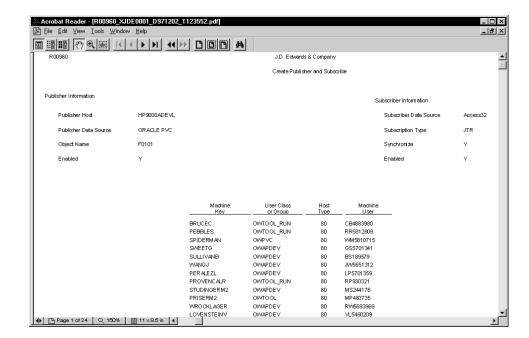
OneWorld Xe (09/00) 3–39

synchronized. When you are ready to use replication in your production environment, you can enable and synchronize the records if the subscriber is a server.

After you create a publisher with its multiple subscribers, you can use the copy feature in the Data Replication application to create additional publisher and subscriber records. This process should save you from manually entering subscriber records.

#### To create publishers and subscribers using a batch process

- 1. On the Advanced Operations (GH9012) menu, choose Create Publisher and Subscriber Records (R00960).
- 2. On the Work With Batch Versions form, choose a version, and click Select. The versions are set up to run in either proof or final mode.
- 3. On the Versions Prompting form, click Data Selection and click Submit.
- 4. On the Data Selection form, choose from the appropriate columns to specify the publisher and subscribers.
- 5. On the Processing Options form, enter the following:
  - For option 1, enter a '1' if you want to run the report in proof mode or leave this field blank to run the report in final mode. Versions have already been set up for this.
  - For option 2, complete the following fields for your publisher record:
    - Publisher Data Source
    - Object Name
    - Enabled
  - For option 3, complete the following fields for your subscriber records:
    - Subscriber Data Source
    - Subscription Type
    - Enabled
    - Synchronize



The following is an example of this report:

The following are possible errors that can occur when running this report:

- Error Inserting the Publisher Record (the publisher record could not be written)
- Error Inserting the Above Subscriber Record (the previous subscriber record could not be written)

## Copying a Publisher and its Associated Subscribers

After you have added one publisher and its subscribers, you can copy that publisher to create new publishers. This means you do not have to re-add subscribers (possibly numbering in the hundreds) to new publishers.

Remember that the easiest way to create the initial publisher and subscriber records from which to copy is to run the Create Publisher and Subscriber Records (R00960) batch process, which reads the Machine Identification (F00960) table to create subscriber records for all workstations.

## To copy a publisher and its associated subscribers

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose a publisher, and click Copy.

- 3. On the Publisher Revisions form, change the data source, the object name information, or both. If you change the data source, and the changed data source is on a different machine, the Host field changes.
- 4. Click OK.

OneWorld creates the new publisher and all of its associated subscribers.

## Setting Up the Environment for Data Replication

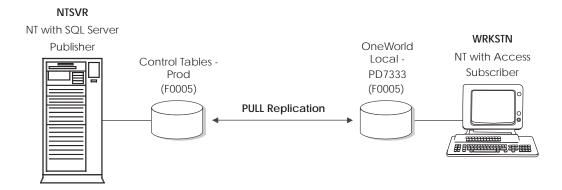
Before using OneWorld data replication, you must set up your environments to use the replication application. This process involves setting up your Object Configuration Manager mappings, your data sources, and the JDBNET database driver (if data tables will reside on different computing platforms).

This section provides examples for the following configurations:

- Setting up a one-tier replication environment
- Setting up a two-tier replication environment
- Setting up replication to a non-OneWorld workgroup server
- Setting up two-tier replication with different platforms

#### Setting Up a One-Tier Replication Environment

This example uses simple one-tier PULL replication between a OneWorld server and a local workstation.



#### **Setting Up OCM Mappings for One-Tier Replication**

For data replication to function correctly, it is important that you have only one centralized copy of the data replication tables (F98DRPUB, F98DRSUB, and F98DRENV). These central tables are typically stored in the System - B7333 data source. You should have active OCM mappings for \*PUBLIC on all platforms for all environments that point to these tables.

If these records are not present on a server, when that server receives a replication message it is likely that the error publisher cache entry not found will be written to the JDE.LOG file, because the server's cache will not contain the correct publisher and subscriber information. If you receive this message, you can verify the location of the F98DRPUB and F98DRSUB tables by looking in the JDEDEBUG.LOG file.

Publishers should not have any OCM mappings for their F98DRLOG and F98DRPCN tables, but subscribers should have mappings that point to their publisher's Server Map data source for these tables.

The Server Map for the publisher (NTSVR - B733 Server Map) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

These mappings exist so that the publisher is able to locate the Publisher and Subscriber definitions and cache them when OneWorld is started on this machine.

The System data source for the subscriber workstations (System B7333) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV exist so that the subscribers are able to locate the publisher and subscriber definitions and cache them when OneWorld is started on those machines. In some cases, you may not have OCM mappings for F98DRENV, but your data replication can still function properly.

#### Setting Up Data Sources for One-Tier Replication

At a minimum, you should have data sources defined for each data source being pointed to in your OCM mappings shown in the previous section. In addition, each publisher should have a data source for the published data, and each subscriber should have a data source for the subscribed data.

The Server Map data source for the publisher (NTSVR - B733 Server Map) should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	NTSVR	System - B7333	SYS7333	JDBODBC.DLL
DB	Control Tables - Prod	NTSVR	Control Tables - Prod	PRODDTA	JDBODBC.DLL

The data source for System - B7333 allows the publisher machine to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data source for Control Tables - Prod allows the publisher machine to access the published table (F0005).

The System data source for the subscriber workstations (System - B7333) should include the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	NTSVR	System - B7333	SYS7333	JDBODBC.DLL
SVR	NTSVR	NTSVR	NTSVR - B733 Server Map	SVM7333	JDBODBC.DLL
DB	NTSVR - B733 Server Map	NTSVR	NTSVR - B733 Server Map	SVM7333	JDBODBC.DLL
DB	OneWorld Local - PD7333	LOCAL	OneWorld Local - PD7333		JDBODBC.DLL

The data source for System - B7333 allows the subscriber machines to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for NTSVR and NTSVR - B733 Server Map allows the subscriber machines to access the F98DRLOG and F98DRPCN tables on the publisher machine. The data source for OneWorld Local - PD7333 allows the subscriber to access the subscribed table (F0005) that is being kept locally.

#### Setting Up Publisher and Subscriber Records

The publisher machine is defined through the Work with Publishers application, and a record for each publisher is entered in the F98DRPUB table. A publisher record for simple one-tier replication would appear as follows:

<b>Publishing Machine</b>	Published Data Source	Object
NTSVR	Control Tables - Prod	F0005

This record indicates that the NTSVR machine is the publisher for the F0005 table in its Control Tables - Prod data source.

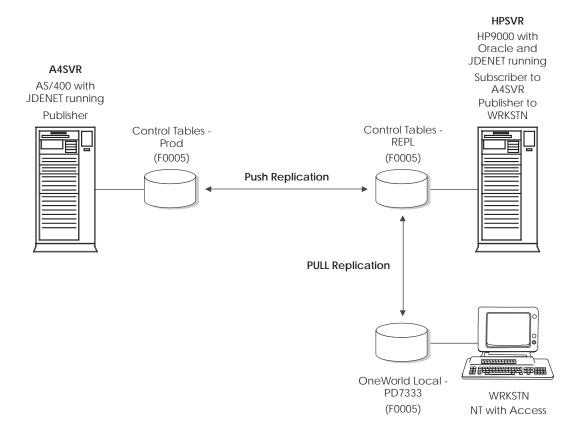
Subscriber machines are defined through the Work with Subscribers application, and a record for each subscriber is entered in the F98DRSUB table. A subscriber record for this example would appear as follows:

Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
WRKSTN	OneWorld Local - PD7333	PUL	N	Y	N

This record indicates that the WRKSTN machine is a PULL subscriber of the previously defined publisher. WRKSTN keeps its copy of the subscribed data in its OneWorld Local - PD7333 data source. Currently the data replication application knows that replication is enabled for this subscriber and that the subscribed table is out of sync with the published table.

## Setting Up a Two-Tier Replication Environment

This example is a two-tier configuration, with push replication from one OneWorld server (enterprise server) to another OneWorld server (workgroup server) and pull replication between the workgroup server and a local workstation.



#### Setting Up OCM Mappings for Two-Tier Replication

For data replication to function correctly, it is important that you have only one centralized copy of the data replication tables (F98DRPUB, F98DRSUB, and F98DRENV). These central tables are typically stored in the System - B7333 data source. You should have active OCM mappings for \*PUBLIC on all platforms for all environments that point to these tables.

Publishers should not have any OCM mappings for their F98DRLOG and F98DRPCN tables, but subscribers should have mappings that point to their publisher's Server Map data source for these tables.

The Server Map data source for the enterprise server (NTSVR - B733 Server Map) should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

These mappings enable the publisher machine to locate the publisher and subscriber definitions and cache the definitions when OneWorld begins to run on this machine.

The Server Map data source for the workgroup server (WGSVR - B733 Server Map) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the WGSVR publisher to locate the publisher and subscriber definitions and cache the definitions when OneWorld begins to run on this machine.

The System data source for the subscriber workstations (System - B7333) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the subscribers to locate the publisher and subscriber definitions and cache the definitions when OneWorld begins to run on those machines.

#### **Setting Up Data Sources for Replication**

At a minimum, you should have data sources defined for each data source being pointed to in your OCM mappings shown in the previous section. In addition, each publisher should have a data source for the published data and each subscriber should have a data source for the subscribed data.

The Server Map data source for the publisher machines should have the following data source definitions.

The Server Map data source for the enterprise server (NTSVR - B733 Server Map) should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	NTSVR	System - B7333	SYS7333	JDBODBC.DLL
DB	Control Tables - Prod	NTSVR	Control Tables - Prod	PRODDTA	JDBODBC.DLL

The data source for System - B7333 allows the publisher machine (NTSVR) to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data source for Control Tables - Prod allows the NTSVR publisher machine to access the published table (F0005).

The Server Map data source for the workgroup server (WGSVR - B7333 Server Map) should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	NTSVR	System - B7333	SYS7333	JDBODBC.DLL
SVR	NTSVR	NTSVR	NTSVR - Server Map	SVM7333	JDBODBC.DLL
DB	NTSVR - Server Map	NTSVR	NTSVR - Server Map	SVM7333	JDBODBC.DLL
DB	Control Tables - REPL	WGSVR	Control Tables - REPL	PRODDTA	JDBODBC.DLL

The data source for System - B7333 allows the publisher machine (WGSVR) to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for NTSVR and NTSVR - Server Map are needed to access the F98DRLOG and F98DRPCN tables on the publisher machine. The data source for Control Tables - REPL allows the WGSVR publisher machine to access its published table (F0005).

The System data source for the subscriber workstations (System - B7333) should include the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	NTSVR	System - B7333	SYSB7333	JDBODBC.DLL
SVR	WGSVR	WGSVR	WGSVR - B733 Server Map	SVM7333	JDBODBC.DLL

DB	WGSVR - B733 Server Map	WGSVR	WGSVR - B733 Server Map	SVM7333	JDBODBC.DLL
DB	OneWorld Local - PD7333	LOCAL	OneWorld Local - PD7333		JDBODBC.DLL

The data source for System - B7333 allows the subscriber machines to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for WGSVR and WGSVR - B733 Server Map are required in order to access the F98DRLOG and F98DRPCN tables on the publisher machine (WGSVR). The data source for OneWorld Local - PD7333 allows the subscriber to access the subscribed table (F0005) that is stored locally.

#### Setting Up Publisher and Subscriber Records for Replication

The publisher machines are defined through the Work with Publishers application, and a record for each publisher is entered in the F98DRPUB table. Publisher records for two-tier replication appear as follows:

<b>Publishing Machine</b>	Published Data Source	Object
NTSVR	Control Tables - Prod	F0005
WGSVR	Control Tables - REPL	F0005

The first record indicates that the NTSVR machine is the publisher for the F0005 table in the Control Tables - Prod data source, and the WGSVR machine is the subscriber. The second record indicates that, in addition to being a subscriber to the NTSVR machine, the WGSVR machine is the publisher for the F0005 table in the Control Tables - REPL data source. The local workstations are the subscribers.

Subscriber machines are defined through the Work with Subscribers application, and a record for each subscriber is entered in the F98DRSUB table. Subscriber records for this example appear as follows:

Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
WGSVR	Control Tables - REPL	PSH	Y	Y	N

This record indicates that the WGSVR machine is a push subscriber of the NTSVR publisher machine. WGSVR keeps its copy of the subscribed data in the Control Tables - REPL data source. Currently, the data replication application knows that replication is enabled for this subscriber and that the subscribed table is in synchronization with the published table.

OneWorld Xe (09/00) 3-49

Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
WRKSTN	OneWorld Local - PD7333	PUL	N	Y	N

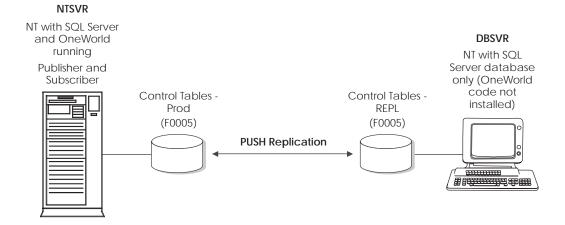
This record indicates that the WRKSTN machine is a pull subscriber of the WGSVR publisher machine. WRKSTN will keep its copy of the subscribed data in the OneWorld Local - PD7333 data source. Currently the data replication application knows that replication is enabled for this subscriber and that the subscribed table is out of synchronization with the published table.

## Setting Up Replication to a Non-OneWorld Workgroup Server

The third example configures push replication from a OneWorld enterprise server to a non-OneWorld database-only workgroup server.

**Caution:** Do not use this mode of replication on an AS/400 workgroup server. To act as a publisher, the AS/400 workgroup needs JDBNET to access the database server. OneWorld needs to reside on the workgroup server for JDBNET to run on the workgroup server.

Also, do not use a Compaq AlphaServer as a publisher for an AS/400 subscriber. Compaq AlphaServers do not use Client Access; therefore, the publisher is unable to update data on the AS/400.



#### Setting Up OCM Mappings for Data Server Replication

For data replication to function correctly, it is important that you have only one centralized copy of the data replication tables (F98DRPUB, F98DRSUB, and F98DRENV). These central tables are typically stored in the System - B7333 data source. You should have active OCM mappings for \*PUBLIC on all platforms for all environments that point to these tables.

Publishers should not have any OCM mappings for their F98DRLOG and F98DRPCN tables, but subscribers should have mappings that point to their publisher's Server Map data source for these tables.

The Server Map data source (NTSVR - B733 Server Map) for the publisher machine should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

These mappings enable the publisher machine to locate the publisher and subscriber definitions, and cache the definitions when OneWorld begins to run on this machine.

The OCM mappings required by workstations are stored in the System - B7333 data source, and should have the following ACTIVE mappings.

The System data source (System - B7333) for the subscriber workstations should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the subscribers to locate the publisher and subscriber definitions, and cache the definitions when OneWorld begins to run on those machines.

#### **Setting Up Data Sources for Replication**

At a minimum, you should have data sources defined for each data source being pointed to in your OCM mappings shown in the previous section. In addition, each publisher should have a data source for the published data, and each subscriber should have a data source for the subscribed data.

The Server Map data source (NTSVR - B733 Server Map) for the publisher machine should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	NTSVR	System - B7333	SYS7333	JDBODBC.DLL
DB	Control Tables - Prod	NTSVR	Control Tables - Prod	PRODDTA	JDBODBC.DLL
DB	Control Tables - REPL	NTSVR	Control Tables - REPL	REPLDTA	JDBODBC.DLL

The data source for System - B7333 allows the publisher machine (NTSVR) to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data source for Control Tables - Prod allows the publisher logic on NTSVR to access the published table (F0005).

The data source for Control Tables - REPL is how the subscriber logic on NTSVR accesses the subscribed table on the workgroup server (DBSVR). Since the subscriber logic is running on NTSVR, then NTSVR must have an ODBC data source definition that points to the SQL Server database on DBSVR. The ODBC data source definition identifies DBSVR as the machine on which the data tables actually reside. OneWorld only needs to know about the NTSVR machine, since the machine is both the publisher and subscriber.

#### Setting Up Publisher and Subscriber Records for Replication

The publisher machines are defined through the Work with Publishers application, and a record for each publisher is entered in the F98DRPUB table. The publisher record for replication to a database-only workgroup server appears as follows:

<b>Publishing Machine</b>	Published Data Source	Object
NTSVR	Control Tables - Prod	F0005

This record indicates that the NTSVR machine is the publisher for the F0005 table in its Control Tables - Prod data source.

Subscriber machines are defined through the Work with Subscribers application, and a record for each subscriber is entered in the F98DRSUB table. The Subscriber record for this example appears as follows:

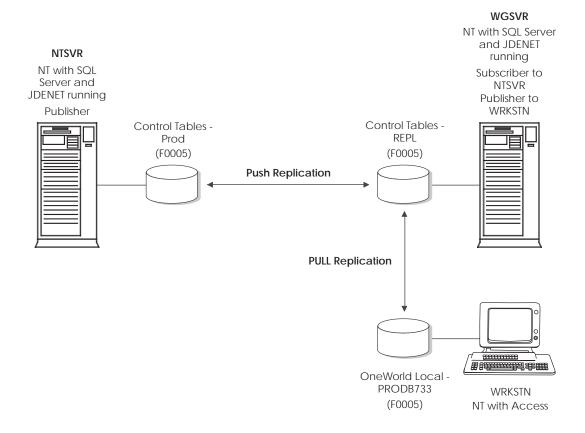
Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
NTSVR	Control Tables - REPL	PSH	Y	Y	N

This record indicates that the NTSVR machine is a PUSH subscriber of the NTSVR *publisher* machine. NTSVR accesses its copy of the subscribed data through its Control Tables - REPL data source. Currently, the data replication application knows that replication is enabled for this subscriber and that the subscribed table is in sync with the published table.

You can point workstations to the database-only workgroup server to read the replicated F0005 table, but you should not allow a workstation to insert, update, and delete data in this table. The workgroup server does not run OneWorld; therefore, the server cannot communicate changes in a replicated table to the publisher. If the workstation changes the replicated table on the workgroup server, the table on the enterprise server and the table on the workgroup server will no longer be in synchronization. Workstations that use a database-only workgroup server should use the replicated tables for validation purposes only. The replicated tables on the workgroup server should be thought of as read-only copies of the published tables.

#### Setting Up Two-Tier Replication with Different Platforms

The fourth example is a two-tier configuration with push replication between two OneWorld servers that run on different platforms, and pull replication between the workgroup server and a local workstation. This configuration requires the use of the JDBNET driver to communicate between differing platforms.



#### **Setting Up OCM Mappings for JDBNET Replication**

For data replication to function correctly, it is important that you have only one centralized copy of the data replication tables (F98DRPUB, F98DRSUB, and F98DRENV). These central tables are typically stored in the System - B7333 data source. You should have active OCM mappings for \*PUBLIC on all platforms for all environments that point to these tables.

Publishers should not have any OCM mappings for their F98DRLOG and F98DRPCN tables, but subscribers should have mappings that point to their publisher's Server Map data source for these tables.

The Server Map data source (A4SVR - B733 Server Map) for the AS/400 should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

These mappings enable the publisher machine to locate the publisher and subscriber definitions, and cache the definitions when OneWorld begins to run on this machine.

The Server Map data source (HPSVR - B733 Server Map) for the HP9000 should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the publisher machine to locate the publisher and subscriber definitions, and cache the definitions when OneWorld begins to run on this machine.

The System data source (System - B7333) for the subscriber workstations should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7333	F98DRPUB	System - B7333	*PUBLIC
PD7333	F98DRSUB	System - B7333	*PUBLIC
PD7333	F98DRENV	System - B7333	*PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the subscribers to locate the publisher and subscriber definitions, and cache the definitions when OneWorld begins to run on those machines.

#### **Setting Up Data Sources for Replication**

At a minimum, you should have data sources defined for each data source being pointed to in your OCM mappings shown in the previous section. In addition, each publisher should have a data source for the published data, and each subscriber should have a data source for the subscribed data.

The Server Map data source (A4SVR - B733 Server Map) for the AS/400 should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	A4SVR	System - B7333	SYS7333	DBDR
DB	Control Tables - Prod	A4SVR	Control Tables - Prod	PRODDTA	DBDR

The data source for System - B7333 allows the publisher machine (A4SVR) to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data source for Control Tables - Prod allows the A4SVR publisher machine to access the published table (F0005). The DBDR database driver (DLL Name) is used for these data sources on the AS/400 server.

The Server Map data source (HPSVR - B733 Server Map) for the HP9000 should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	A4SVR	System - B7333	SYS7333	LIBJDBNET.SL
SVR	A4SVR	A4SVR	A4SVR - Server Map	SVM7333	LIBJDBNET.SL
DB	A4SVR - Server Map	A4SVR	A4SVR - Server Map	SVM7333	LIBJDBNET.SL
DB	Control Tables - REPL	HPSVR	Control Tables - REPL	PRODDTA	LIBORA80.SL

The data source for System - B7333 allows the publisher machine (HPSVR) to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for A4SVR and A4SVR - Server Map are needed to access the F98DRLOG and F98DRPCN tables on the publisher machine. The data source for Control Tables - REPL allows the HPSVR publisher machine to access its published table (F0005). The LIBJDBNET.SL database driver (DLL Name) is used for the data sources residing on the AS/400. The LIBORA80.SL database driver (DLL Name) is used for the data sources residing in Oracle.

The System data source (System - B7333) for the subscriber workstations should have the following data source definitions in the Data Source Master table (F98611):

Туре	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7333	A4SVR	System - B7333		JDBODBC.DLL
SVR	HPSVR	HPSVR	HPSVR - B733 Server Map	SVM7333	JDBOCI80.DLL
DB	HPSVR - B733 Server Map	HPSVR	HPSVR - B733 Server Map	SVM7333	JDBOCI80.DLL
DB	OneWorld Local - PD7333	LOCAL	OneWorld Local - PD7333		JDBODBC.DLL

The data source for System - B7333 is how the subscriber machines access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for HPSVR and HPSVR - B733 Server Map are needed to access the F98DRLOG and F98DRPCN tables on the publisher machine (HPSVR). The data source for OneWorld Local - PD7333 allows the subscriber to access the subscribed table (F0005) that is kept locally. The JDBODBC.DLL database driver DLL Name is used to access LOCAL and AS/400 data sources, while the JDBOCI73.DLL database driver DLL is used to access Oracle.

#### Setting Up Publisher and Subscriber Records for Replication

The publisher machines are defined through the Work with Publishers application, and a record for each publisher is entered in the F98DRPUB table. Publisher records for two-tier replication appear as follows:

<b>Publishing Machine</b>	Published Data Source	Object
A4SVR	Control Tables - Prod	F0005
HPSVR	Control Tables - REPL	F0005

The first record indicates that the A4SVR machine is the publisher for the F0005 table in its Control Tables - Prod data source, and the HPSVR machine is the

subscriber. The second record indicates that, in addition to being a subscriber to the A4SVR machine, the HPSVR machine is the publisher for the F0005 table in the Control Tables - REPL data source, and the local workstations will be the subscribers.

Subscriber machines are defined through the Work with Subscribers application, and a record for each subscriber is entered in the F98DRSUB table. The subscriber record for this example appears as follows:

Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
HPSVR	Control Tables - REPL	PSH	Y	Y	N

This record indicates that the HPSVR machine is a push subscriber of the A4SVR publisher machine. HPSVR keeps a copy of the subscribed data in the Control Tables - REPL data source. Currently, the data replication application knows that replication is enabled for this subscriber and that the subscribed table is in synchronization with the published table.

Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
WRKSTN	OneWorld Local - PD7333	PUL	N	Y	N

This record indicates that the WRKSTN machine is a pull subscriber of the HPSVR publisher machine. WRKSTN keeps a copy of the subscribed data in the OneWorld Local - PD7333 data source. Currently, the data replication application knows that replication is enabled for this subscriber and that the subscribed table is out of synchronization with the published table.

## **Setting up Forced Synchronization**

You can also set up forced synchronization. Generally, to ensure that the replicated tables on the publisher and the subscriber match, your workstation runs a forced synchronization the first time anyone signs on. If you require the synchronization of all replicated tables, you can manually set the ForcedSync setting in your jde.ini file to perform a synchronization. Complete the following tasks:

- Modify the workstation jde.ini files
- Modify the server ide.ini file
- Set up a workstation for forced synchronization



#### To modify the workstation jde.ini files

For all workstations that have OneWorld installed, you must change the workstation's jde.ini file in one of two ways:

- Manually change the jde.ini file on each workstation (not recommended).
- Change the jde.ini file on the deployment server and redeploy a package.
  You can deploy an update package with the Replace JDE.ini flag checked,
  or you can deploy a full or partial package, because they also replace the
  jde.ini file.

Whichever method you choose, complete the following:

1. Locate the jde.ini file, either on each workstation, or on the deployment server in the following release share path:

```
\\B733\client\misc\jde.ini
```

2. Using an ASCII editor, such as Microsoft Notepad, verify the following settings:

```
[SECURITY]
DefaultEnvironment=default environment name

[DEBUG]
RepTrace=replication trace 1/0 (ON/OFF)
```

## To modify the server jde.ini file

- 1. Locate your server jde.ini file.
- 2. Using an ASCII editor, verify the accuracy of the following settings:

```
[SECURITY]
User=user ID
Password=database password
DefaultEnvironment=default environment name

[DEBUG]
RepTrace=replication trace 1 or 0 (for ON/OFF)
```

Variable	Description
user ID	The database ID that has access to the replication files (F98DRPUB, F98DRSUB, F98DRENV).
database password	The database password that has access to the replication files (F98DRPUB, F98DRSUB, F98DRENV).
default environment name	Any valid environment for the path code in which the publisher resides.
replication trace 0/1 (off/on)	You can enable replication trace if you want to perform troubleshooting on your replication process. When you enable this trace, the replication process sends additional information to the jde.log file. Do not leave replication trace on permanently, because the jde.log file will become too large.
	Valid values are:
	0 = OFF
	1 = ON

**Caution:** Avoid maintaining two separate data dictionaries. Typically, you should have one data dictionary that your DEVB733 and PRODB733 path codes share. However, if you make changes to data items that applications use in the live production environment, and these changes cause those applications to break, then you need to have a separate data dictionary for your development path code. Under most circumstances, data dictionary changes made after going live with OneWorld are additions of new items and modifications to items that are for applications still under development. If you must have two data dictionaries, then you are using replication in a way that J.D. Edwards has not tested. If you do have a separate data dictionary for the DEVB733 and PRODB733 path codes, you should set up data dictionary replication only for the PRODB733 data dictionary. See *Data Dictionary Administration* for more information about managing data dictionary changes.

#### To set up a workstation for forced synchronization

- 1. Locate the workstation ide.ini file.
- 2. Using an ASCII editor, set the value for the following setting to 1:

[REPLICATION]				
ForcedSync=forced	synchronization	0/1	(off/on)	

OneWorld Xe (09/00) 3–59

The next time that you sign on to OneWorld on the machine, OneWorld performs a forced synchronization of all replicated tables. After the forced synchronization, OneWorld automatically turns off the setting.

**Note:** If the [REPLICATION] section does not contain the ForcedSync setting, OneWorld performs a forced synchronization, and then automatically writes ForcedSync=0 into the [REPLICATION] section.

Variable	Description
forced synchronization 0/1 (off/on)	You can set a machine to perform a forced synchronization of replicated tables. When you force synchronization, OneWorld copies all replicated tables from the publisher to the subscriber when you sign on to OneWorld on the machine.
	The valid values are:
	<ul><li>0=off</li><li>1=on</li></ul>

## **Viewing the Replication Logs**

You can view the various replication logs for:

- Outstanding changes for a given host
- Publisher changes that the Pending Change Log did not receive
- Pull subscribers that have not retrieved changes

#### Viewing Outstanding Changes for a Given Host

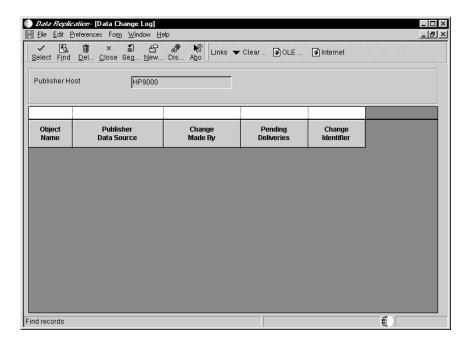
View the Replication Change Log (F98DRLOG) to see all changes to published tables (for the selected host) that have not been delivered to all enabled subscribers. The Pending Deliveries field displays the subscribers that have not received a particular change.



#### To view outstanding changes for a given publisher

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On Work With Publisher, choose Data Change Log from the Form menu.
- 3. On the Publisher Data Source Search & Select form, choose the publisher host and click Select.

The Data Change Log form appears. This form shows the number of pending messages that the replication process needs to deliver for a given change.



- 4. To view the subscribers waiting to receive a change, choose a row and click Select. See *Viewing Pull Subscribers that have not Retrieved Their Changes* in this guide for more information.
- 5. You can delete any log entries that you know the replication process will never send. However, first verify that the entries in the Pending Change Notification Log are deleted *first*. On the Pending Deliveries form, choose the log entry and then delete any pending deliveries shown. Then, on the Data Change Log form, choose the log and click Delete.

Field	Explanation
Change Made By	The name of the network server where data resides or where objects can be executed.
	Form-specific information
	On this form, the Change Made By field indicates the machine name where the change was initiated. You can use this information to track down the person who used this machine to change a publisher table.
Pending Deliveries	Number of pending deliveries for a particular change to a published object.

OneWorld Xe (09/00) 3–61

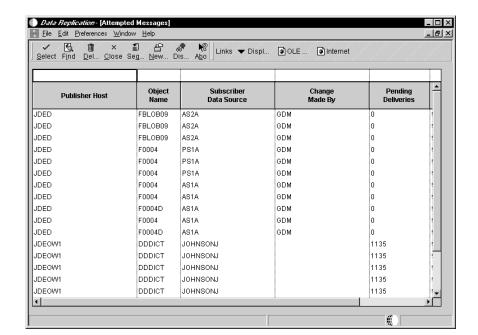
Field	Explanation
Change Identifier	A generic ID for FDA and RDA specifications.
	Form-specific information
	A unique number used to retrieve the modified data from the Data Change Log table.
	On this form, the Change Identifier is used to track a change made to a published table. You can use this number to see which changes have not been delivered to specific subscribers.

# Viewing Publisher Changes that the Pending Change Log Did Not Receive

View this log to find changes that the Pending Change Notification Log (F98DRPCN) never received. For example, if a user makes a change to a table, the workstation writes this change to the Replication Change Log (F98DRLOG). But if OneWorld is down on that server, then the Pending Change Notification Log does not receive that message. The change is then stored in the Replication Change Log and the Pending Change Notification Log in the system data source. OneWorld replicates these changes to subscribers the next time the machine that made the changes signs onto OneWorld.

#### To view publisher changes the Pending Change Log did not receive

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose Attempted Messages from the Form menu.



The Attempted Messages form appears.

OneWorld stores Attempted Messages in the Data Replication Change Log (F98DRLOG) table in the system data source. You should monitor these messages regularly, addressing those that are still relevant, and removing those that are not.

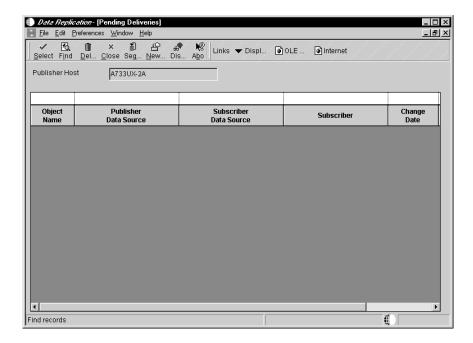
## Viewing Pull Subscribers Who Have Not Retrieved Their Changes

This log allows you to view pull subscribers that have not signed onto OneWorld since a publisher table changed.

## To view pull subscribers that have not retrieved their changes

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose Pending Deliveries from the Form menu.
- 3. On the Machine Search & Select form, choose the publisher host, and click Select.

The Pending Deliveries form displays the Pending Change Notification Log (F98DRPCN).



- 4. To view outstanding changes for a given publisher, choose a row and click Select. See *Viewing Outstanding Changes for a Given Publisher* for more information.
- 5. You can delete any messages that you know the replication process will never send. On the Pending Deliveries form, choose the message, and click Delete.

## **Replicating Data Dictionary Changes**

The master copy of the data dictionary resides on an enterprise database server in OneWorld relational database (RDB) tables (F92\*). Regardless of whether you activate data replication through the Data Replication application (P98DREP), the OneWorld replication engine automatically builds a copy of data dictionary items in the OneWorld Table Access Management (TAM) format on every OneWorld workstation in the enterprise. This setup enhances performance when a table or application accesses the data dictionary.

Initially, OneWorld creates empty data dictionary TAM files. When a user runs applications on the workstation, the replication engine detects the requests for data dictionary items and loads the data items into the workstation TAM files using just-in-time-replication (JITR). The workstation downloads each data dictionary item once and maintains the attributes for the item in the local TAM specifications regardless of whether the RDB tables containing the item change on the server. This form of data dictionary replication is the simplest and is always active.

When you transfer data dictionary files to a server, you must use the Recreate Replicated Data Dictionary (R92TAM) batch application and the TAMFTP.exe program.

To synchronize the RDB tables and the TAM files on the workstation, you must set up and enable data dictionary replication through P98DREP.

Understanding data dictionary replication
 Setting up data dictionary replication
 Copying data dictionary files to a server using TAMFTP.exe

## ☐ Processing options: R92TAM

This section contains the following topics:

## **Understanding Data Dictionary Replication**

By default, OneWorld only loads data dictionary items into the local TAM files the first time that a OneWorld application calls the data item. When the master copy of the data dictionary changes on the server, the workstation data dictionary in the TAM files does not automatically receive those changes unless the change is an addition of a new data dictionary item. You must manually set

data replication for the data dictionary TAM files to automatically receive changes and deletions.

The following list shows the various ways that you can set up data dictionary replication:

Default just-in-time replication (JITR) for additions only
Just-in-time replication for changes and deletions
Data dictionary replication flow for a workgroup server configuration
Replicating data dictionary tables on a workgroup server
Replicating data TAM specifications on logic servers

#### Default Just-In-Time-Replication for Additions Only

This type of replication provides only updates to the workstation TAM files for new data dictionary items that do not already reside on the workstation.

For example, when a user adds a new data dictionary item, this change occurs on the server with the data dictionary tables (F92\*). The workstation receives the changes during a OneWorld session when a user accesses a field that uses the new data dictionary item.

**Caution:** This type of data dictionary replication does not support changes or deletions to current data dictionary items. When the workstation accesses the data dictionary item that another user changed or deleted, the workstation TAM files have no way of knowing that the data dictionary items are different than the items that currently exist in the local TAM files on the workstation. To automatically update changes, you need to manually set up and enable data replication for the data dictionary through the Data Replication application (P98DREP) as described later in this section.

If you use the default JITR data dictionary replication, to propagate changes or deletions of data dictionary items to workstations, you need to clear the TAM files by deleting the DDDICT.\*, DDTEXT.\*, and GLBTBL.\* files from the following directory:

\b7\pathcode name\spec

The next time you log on to OneWorld from that workstation, OneWorld will automatically create new TAM files using the current data dictionary.

#### Just-In-Time-Replication (JITR) for Change and Delete

This replication type allows you to set replication so that when a user changes or deletes an existing data dictionary item, those modifications automatically

replicate to the workstation. You must manually set up and enable data replication through the Data Replication application (P98DREP) as described later in the chapter.

**Note:** When you replicate the data dictionary to the workstation TAM files, you must name the object DDDICT.

# Data Dictionary Replication Flow for a Workgroup Server Configuration

To increase performance, you can use a workgroup server to add an extra tier in your configuration. You can set up this workgroup server as both a subscriber and a publisher. Workstations point to the workgroup server as the publisher from which to pull the tables for pull replication. The following process flow assumes that you will use a workgroup server as a subscriber server. If you do not use a workgroup server, the workstation pulls tables directly from the publisher server for replication purposes. See *Replicating the Data Dictionary Tables on a Workgroup Server* for more information.

The following explains the replication flow of the data dictionary:

- 1. The publisher server for the data dictionary tables (F92\*) replicates the tables to the subscriber workgroup server through push replication.
- 2. Through pull replication, when a workstation logs on to OneWorld, OneWorld converts the data dictionary RDB tables into TAM from either the workgroup server or the enterprise server, depending on whether the server is local to a given workstation.
- 3. The workstation stores the data dictionary TAM files in the local TAM database on the workstation.
- 4. When the workstation requires a data dictionary item, OneWorld accesses the local TAM database for the data dictionary item.
- 5. A workstation adds a new data dictionary item to the data dictionary on the publisher server or the subscriber workgroup server, based on OCM mappings.
- 6. Changes then propagate from the publisher data dictionary level, F92\* tables, to all other subscriber data dictionaries, (F92\* tables, and then to all workstations.)

## Replicating Data Dictionary Tables on a Workgroup Server

**Important:** When you use an AS/400 as the publisher server, OneWorld *must* reside on the workgroup server because JDBNet needs to run on the workgroup server for replication to occur successfully.

If you support a large number of workstations in a remote office, you can replicate data dictionary tables to workgroup servers in a Wide Area Network (WAN) environment to reduce network traffic. This type of replication reduces network traffic by allowing remote workstations to retrieve data dictionary items

from the workgroup server rather than from the home office publisher. When the remote workstations eventually build the required items into resident TAM files, OneWorld requires still less network traffic to retrieve data.

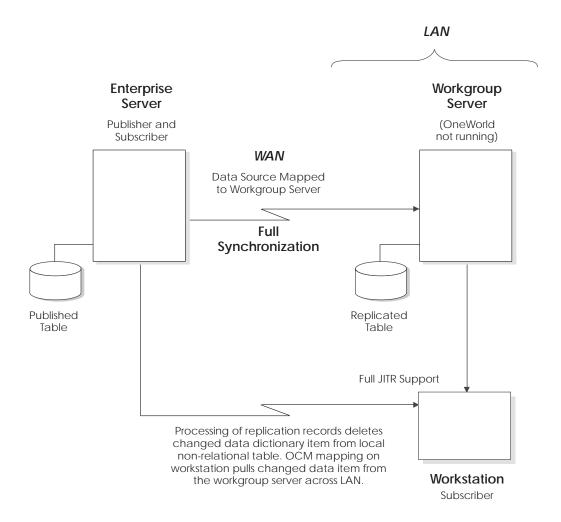
You can also set up a workgroup server as a database-only workgroup server to support your data replication strategy. A database-only workgroup server does not run any OneWorld server code. To set up a workgroup server, use the following steps:

#### To set up a workgroup server

- 1. Set up the enterprise server as both publisher and subscriber. The data source for the subscriber on the enterprise server resides on the database-only workgroup server. You must set up the enterprise server as a subscriber to perform the logic for the workgroup server because the workgroup server is database-only. This setup synchronizes the workgroup server with the RDB data dictionary tables.
- 2. Set up the client as a subscriber to the published tables on the enterprise server.
- 3. Map the client Object Configuration Manager (OCM) to the workgroup server. This setup ensures that JITR replicates to the client from the workgroup server across the LAN rather than across the WAN.

The following graphic illustrates this configuration:

#### Replicating the Data Dictionary to Workgroup Servers



# Replicating Data Dictionary TAM Specifications on Logic Servers

Logic servers do not use the just-in-time data dictionary concept. Instead, OneWorld supports a prebuilt data dictionary for these machines in TAM format. To provide TAM data dictionary specifications for logic server processing, you must run the R92TAM UBE and then transfer TAM specifications to the server using TAMFTP.exe. You should use this process when changes or additions to the data dictionary occur and you need to update the data dictionary TAM specifications on the server.

OneWorld Xe (09/00) 3–69

Table	Description	Purpose
F9200	Data Item Master	Provides a relational breakdown of the data dictionary.
F9202	Data Field Display Text	Contains display text for each data field for language, data item, and system code reporting. This table is used when a user or OneWorld requests a description of a data item.
F9203	Data Item Alpha Descriptions	Contains easily searchable descriptions and compressed descriptions of data items. This table is used when a user or OneWorld requests a description of a data item. Similar to F9202.
F9207	Data Dictionary – Error Message Information	One record per error message.
F9210	Data Field Specifications (OneWorld)	Contains detailed information (specifications) for each data item. This table is accessed whenever a data item needs to be identified.
F9211	Data Dictionary – Smart Fields	Information for smart fields.

#### See Also

*Data Dictionary Administration* in this guide for more information about modifying the data dictionary.

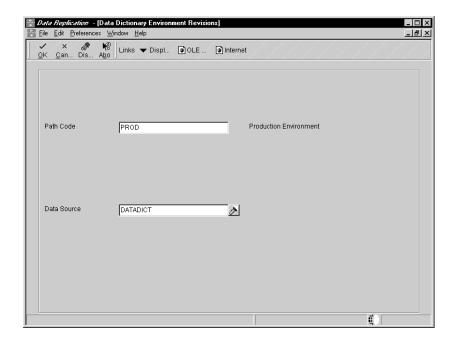
# **Setting Up Data Dictionary Replication**

When you set up data dictionary replication, you need to set up pointers that the publisher can follow to determine the data dictionary specification tables on a workstation. These pointers provide the path code that the publisher uses to locate the specification tables.

**Note:** Although you enter information for the pointer in the Data Source field, the pointer is not an actual data source. The pointer only directs the publisher to the appropriate path code to ensure that data dictionary replication completes successfully.

# To set up data dictionary replication

- 1. On the System Administration Tools (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work with Publishers form, choose Environment Map from the Form menu.
- 3. On the Work with Data Dictionary Environments form, click Add.



- 4. On the Data Dictionary Environment Revisions form, complete the following fields:
  - Path Code

Type the path code for the workstation, such as, PROD or DEV.

Data Source

Type DATADICT in this field.

**Note:** This is not a real data source. The replication process uses "data source" entries to determine the path code for the data dictionary TAM specification files on the workstation.

5. Create one publisher record using the object name DDDICT.

The publisher data source is the data source where your data dictionary tables reside. See *Adding a Publisher* for more information.

6. Add one subscriber for each machine to which you want to replicate the data dictionary.

The data source for the subscriber must be DATADICT to match the entry you made on the Data Dictionary Environment Revisions form. See *Adding a Subscriber* for more information.

OneWorld Xe (09/00) 3–71

# Copying Data Dictionary Files to a Server Using TAMFTP.exe

When you need to replicate changes to the data dictionary on a server, you must run the Recreate Replicated Data Dictionary (R92TAM) batch application on a workstation, and then transfer the TAM specifications using TAMFTP.exe.

Complete the following tasks in this order:

- Recreate replicated data dictionary files
- Transfer data dictionary files to your enterprise server

# To recreate replicated data dictionary files

- 1. From the Data Dictionary Design menu (GH951), choose Recreate Replicated Data Dictionary (R92TAM).
- 2. On Work with Batch Versions, choose version XJDE0001.
- 3. If you have an alternative language, such as Japanese, perform the following step. Otherwise, skip to step 4.

On Version Prompting, from the Row menu, choose Processing Options and enter the following information, then click OK:

• Language Preference

Use the flashlight button to select the correct value for your language.

All Languages

To build all languages, type 1.

- 4. Click Select.
- 5. On Version Prompting, choose Advanced from the Form menu.
- 6. On Advanced Version Prompting, turn on the Override Location option.
- 7. Click OK.
- 8. On Version Prompting, click Submit.
- 9. On Work with Batch Versions, choose the location where you want your batch job to process and click Select.
- 10. After the job finishes, log off OneWorld.

#### To transfer data dictionary files to your enterprise server

- 1. From a client workstation, locate the tamftp.exe program. It is typically in the /b7/system/bin32 directory.
- 2. Run the program by double-clicking it.
- 3. When prompted to do so, enter JDE as the both user and the password. Choose the environment that you are currently installing.

A DOS window appears and displays the program's interface.

**Note:** If you need to stop the program, click the X button in the upper right corner of the form.



- 4. The program prompts you with the following questions. The appropriate response or choice of responses is noted beneath each.
  - Do you want to copy all of the supported spec types (y/n)?
     Enter N.
  - The program prompts you with each type of specification file.
    - Enter Y for dddict and ddtext. Enter  $\,\mathbb{N}\,$  for all other specification types.
  - Do you want to create a new database for each spec type to copy (y/n)?

Enter Y.

Are the spec files to copy located in D:\b7\prod\spec (y/n)?
 Enter N.

OneWorld Xe (09/00) 3–73

As prompted, enter the actual directory where the specification files exist, for example, d:\b7. This is the \b7 directory on the client workstation.

• Do you want to pack the files to go in c:\temp (y/n)?

If this is where you want to store packed files (.pak), enter Y. If you want to specify a different directory, enter N.

If you entered N for the previous question, the program prompts you to enter an alternative directory. Verify that the directory exists on the client workstation.

• Do you want the pack files to be deleted at the end (y/n)?

If you want to delete the .pak files from the client workstation in the \temp directory specified in the previous step, enter Y. If you do not want to delete the .pak files from your client workstation, enter N.

Do you want the TAM FTP log file to go in c:\ (y/n)?

If you want the program to write the log file to the root directory on the c: drive of your workstation, enter Y.

If you want to specify a drive or directory for the log file, enter N.

The name of the log file is tamftp.log.

If you enter N, the program prompts you to enter a valid drive and path.

• What machine do you want to TAM FTP to?

Specify the name of the enterprise server that is the target for the specification file transfer. You can specify either a valid TCP/IP name or an IP address.

In what directory do you want to put the specs to copy?

Specify a valid directory on the enterprise server that is the target for the specification file transfer. You should create this directory before running tamftp and verify that the directory is different from the specification directory where OneWorld resides. The program moves the unpacked specification files after the file transfer is complete.

• Do you want to unpack log entries made (y/n)?

Enter N. The program logs all necessary information into the tamftp.log on the client workstation. You do not need to duplicate this information on the enterpriser server.

When you press Enter after you answer the last question above, the tamftp program starts and displays the following message:

OneWorld TAM FTP in progress...

When the tamftp program finishes, the following message appears:

The spec copy is done.

Press the Enter key to quit.

- 5. Press Enter.
- 6. Review the tamftp log in the location that you specified for results, for example c:\.
- 7. Move the dddict and ddtext specification files from the target directory on the enterprise server to each path code spec directory, for example, DV7333\spec.

# **Processing Options: R92TAM**

#### **Process**

These processing options specify the language preferences used when running R92TAM.

#### 1. Language Preference

Use this processing option to indicate the language that is built when R92TAM runs. Use the visual assist to choose a valid language. Valid values are:

Blank Builds the domestic language only

Language Builds the domestic language and the language specified in this input box

TAM specs are created in the B7 directory. TAM files are built from the Data Dictionary RDB tables.

#### 2. All Languages

Use this processing option to indicate the languages that are built when R92TAM runs. Valid values are:

Blank Build TAM based on information in the first input box.

1 Build all languages.

# **Data Dictionary Administration**

Just as a dictionary contains word definitions, the J.D. Edwards data dictionary is a central repository that contains data item definitions and attributes. These attributes determine how a data item:

- Appears on reports and forms
- Validates data entry within an application
- Assigns column and row descriptions
- Provides text for field-sensitive help

The Oneworld data dictionary is *active*, because changes that you make are automatically reflected in applications without having to recompile the software.

You should assign one or two people to be your data dictionary administrator for each application area in your OneWorld enterprise. Data dictionary administrators should be experienced with OneWorld and have a fairly comprehensive knowledge of their product area, such as financial or manufacturing. The data dictionary administrator makes all additions, changes, and deletions to data items for the product group. Such changes are reflected in the pristine data dictionary on your enterprise server.

Data dictionary administrators should consider the following:

- If your setup is similar to the suggested setup in the *Typical Customer Configuration* section of the *CNC Implementation Guide*, then all environments share the same data dictionary. Therefore, the administrator can sign onto any environment to make changes. It is highly recommended that you use the Security Workbench to assign application security on the Data Dictionary application (P98DREP) to prevent unauthorized users from making data dictionary changes. See *Working with Security Workbench* in this guide.
- If you are running a coexistence enterprise, you must create all of your data items in both WorldSoftware and OneWorld, because the two products cannot share the same data dictionary.

Replicating the data dictionary is also a system administrator task. You will need to know where OneWorld stores the publisher data dictionary and how to manage data dictionary changes using data replication. If you are a coexistence customer, you need to know how to synchronize WorldSoftware and OneWorld data dictionaries.

This section also describes how an administrator uses reports to update display decimals in the data dictionary.

This s	ection contains the following tasks:
	Understanding data dictionary replication
	Synchronizing WorldSoftware and OneWorld data dictionaries
	Updating display decimals
Before You	Begin
	Ensure that you are familiar with the concepts in the <i>Data Dictionary</i> in the <i>Tools Guide</i> . This section describes using the data dictionary and defining a data term.

# **Understanding Data Dictionary Replication**

In a typical OneWorld environment, there are three copies of the data dictionary. Two of these copies are in TAM format and one is in a relational database (RDB). The following explains how the data dictionary works on different OneWorld machines.

The deployment server could have copies of the data dictionary stored in packages. On the workstation, one copy of the data dictionary resides on the workstation in a TAM format. This workstation copy is used when running logic locally.

On the enterprise server, one copy of the data dictionary resides in TAM format and is used when running logic on this server. A second copy is used on inquiry in the data dictionary application, for just-in-time installation (JITI) and when creating packages. This second copy of the data dictionary is the publisher data dictionary, where you make all data dictionary changes that you want replicated to servers and workstations. OneWorld stores the publisher data dictionary in the following tables:

- Data Item Master (F9200)
- Data Field Display Text (F9202)
- Data Item Alpha Descriptions (F9203)
- Data Dictionary Error Message Information (F9207)
- Data Field Specifications (F9210)
- Data Dictionary Smart Fields (F9212)
- Media Objects Storage (F00165)

OneWorld supports a just-in-time data dictionary. When a user accesses an application for the first time, OneWorld installs (just in time) all data dictionary information required to run that application. This means that when installing a package (full or partial) to a machine, data dictionary information is not included.

OneWorld replicates data dictionary information from the relational data dictionary to the workstation's specification tables. Anytime that OneWorld cannot find data dictionary information in the specification tables, it retrieves the information (just in time) from the relational data dictionary. This process occurs regardless of any data dictionary replication that you have set up.

You should set up data dictionary replication to replicate changed data dictionary items to workstations. The following bullets explain the process for data dictionary replication to workstations:

- A person with security to the data dictionary application changes the
  publisher data dictionary (the relational tables on the enterprise server). If
  your environment configuration follows the typical customer
  configuration, then all environments map the data dictionary to the
  publisher tables; therefore, the administrator can make the change from
  any environment. You must set up data dictionary replication for
  workstations as pull replication.
- The next time that a user signs onto OneWorld, it deletes from their workstation's specification tables those data items that were changed. The next time that the user accesses an application that requires that specific data dictionary information, OneWorld retrieves it just in time from the publisher data dictionary.

Changes to row and column descriptions are not automatically replicated to workstations. To replicate a row or column data dictionary change, do one of the following:

- Build and deploy a full or partial package, or
- If you know the applications for which you want the row or column change to be reflected, you can build and deploy an update package with those applications as either just-in-time installation item types, or object item types.

However, glossary changes are dynamic and do not need to be replicated, because workstations read the Media Object Detail (F00165) table each time that a glossary is accessed. You access glossaries via field-level help (pressing the F1 key or using the Help "What's This" menu item). Enterprise servers do not use the just-in-time data dictionary concept. Therefore, changes must be replicated to servers through a batch process. See *Replicating Data Dictionary Changes to Servers* for more information.

This topic contains the following:

Replicating data dictionary changes to workstations

Replicating data dictionary changes to servers

Troubleshooting the data dictionary

# **Replicating Data Dictionary Changes to Workstations**

This topic explains how to replicate data dictionary changes to workstations, and it contains the following:

	Concepts of replicating data dictionary changes to workstations
	Setting up data dictionary workstation replication
Before You	Begin
	Familiarize yourself with the principles of data replication as explained in the <i>Data Replication</i> section in this guide.

# **Concepts of Replicating Data Dictionary Changes to Workstations**

OneWorld stores data dictionary information on each workstation in a permanent cache under the local \path code\spec directory as glbtbl.xdb and glbtbl.ddb. If you change data items and you want to immediately replicate the changes to workstations, you must use the Data Replication (P98DREP) application. You can use this application to notify subscriber workstations of changes.

The data dictionary replication software detects when an item is changed and maintains tables containing replication messages. When an item is changed, the next time a subscriber machine signs onto OneWorld, it pulls a replication message that tells it which item has changed. As a result, OneWorld on the workstation modifies the permanent cache for the data dictionary by deleting that data item. The next time that the workstation runs an application that requires the deleted data item, OneWorld detects that the information is not in the permanent cache and pulls the information from the publisher data dictionary (the relational database tables).

**Important:** Avoid having two separate data dictionaries. Typically, you should share one data dictionary between your development and production environments. That is, there should be a single data dictionary in a single path code shared by each environment. However, if you make changes to data items that applications use in the live production environment, and these changes will cause those applications to fail, then you need to have a separate data dictionary for your development environment.

Under most circumstances, data dictionary changes made after going "live" with OneWorld are to add new items and modify items that are for applications still under development. If you need two data dictionaries, then you are using replication in a way that J.D. Edwards has not tested. If you do have a separate data dictionary for development and production environments, set up data dictionary replication only for the production data dictionary.

#### Setting Up Data Dictionary Replication on the Workstation

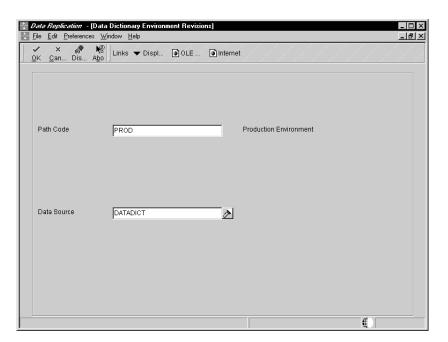
This task explains how to replicate data dictionary changes to workstations. Set up your replication as follows:

- Add only one publisher record for workstation data dictionary replication, using the object name DDDICT. This object name represents all of the data dictionary files.
- Set up one subscriber record for each machine to which you want to replicate the data dictionary.

**Important:** The subscriber data source must be the same data source that you enter on the Work With Data Dictionary Environments form, as explained in this task.

#### To set up data dictionary workstation replication

- On the System Administration Tools menu (GH9011) menu, choose Data Replication (P98DREP).
- 2. On the Work With Publishers form, choose Environment Map from the Form menu.
- 3. On the Work With Data Dictionary Environments form, click Add.



- 4. On the Data Dictionary Environment Revisions form, enter one record for each path code. The data source on this form is not a real data source. It is used as a link to the subscribers to determine which path codes should receive the data dictionary changes. Enter the data sources as follows:
  - Production data source = DATADICT
  - Development data source = DATADICT

Use DATADICT for both values, unless you have a different data dictionary for each path code (which is *not* recommended). If you have two data

dictionaries, use a different value for each, such as DATADICTPROD and DATADICTDEV.

- 5. Create one publisher record using the Object Name: DDDICT. The publisher data source is the data source where your data dictionary tables reside. See *Adding a Publisher* in the *Data Replication* section for more information.
- 6. Add one subscriber for each machine to which you want to replicate the data dictionary. The data source must be the same as you entered on the Data Dictionary Environment Revisions form (DATADICT). See *Adding a Subscriber* in the *Data Replication* section for more information.

When adding these subscribers, make sure that the Enabled field on the Subscriber Revisions form is set to Y. Otherwise, replication will not occur.

**Important:** If the Pending Change Notifications log (F98DRPCN) and the Replication Change Log (F98DRLOG) reside on an AS/400, the Client Access ODBC data source must be set to "Do Not Translate." If it is not set properly, the replication messages will be corrupted.

# **Replicating Data Dictionary Changes to Servers**

This topic describes how to replicate the publisher data dictionary stored in relational files to the replicated subscriber data dictionaries. This is server-to-server or server-to-workstation push replication. OneWorld logic servers access a replicated data dictionary stored in the following specification files:

- JDEKRNL.ddb
- JDEKRNL.xdb
- DDDICT.ddb
- DDDICT.xdb
- DDTEXT.ddb
- DDTEXT.xdb

**Before** 

You have the choice of replicating only the changed items or replicating all changes, including deleted items. This topic contains the following:

	Replicating only the changed items
	Refreshing the data dictionary
You	Begin
	Before continuing with this topic, become familiar with the principles of data replication, as explained in the <i>Data Replication</i> section.

OneWorld Xe (09/00) 4–7

## Replicating Only the Changed Items

If there are data dictionary changes, you can use a batch process to replicate them before deploying a new package to the enterprise server. This process replicates changes from the relational data dictionary (publisher) to the replicated data dictionaries (subscribers) on other servers, but does not delete items from the replicated data dictionaries. To delete items in the replicated data dictionary, you must use the global update application. See *Replicating All Changes (Global Update)* in this section for more information.

The administrator's workstation must have the most recent installation of your production path code. If you cannot install a workstation package that includes the most recent replicated data dictionary specifications, then manually copy them to your local machine. These files include:

- JDEKRNL.ddb
- JDEKRNL.xdb
- DDDICT.ddb
- DDDICT.xdb
- DDTEXT.ddb
- DDTEXT.xdb

The administrator's workstation (the machine from which you are running this batch process) must have a complete data dictionary residing on it. Because workstations use a distributed (just-in-time) data dictionary, their copy of the data dictionary will not contain a complete set of all data dictionary items. Therefore, J.D. Edwards provides a complete data dictionary with the installation process so that you can copy it to the machine that runs this batch process for servers.

## Before You Begin

Copy the complete data dictionary from your deployment server's base installation directory (\\Deployment Server Name\OneWorld Release\Data Dictionary) to the workstation's b7\path code\spec directory. You should only need to do this once, assuming that you continue to use the same workstation for the server replication process. Each time that you refresh the data dictionary tables, you might want to save them to a file server in case you need to reload the workstation.

# To replicate only the changed items

- 1. On the Data Dictionary Design menu (GH951), choose Replicate Data Dictionary Changes (R92001T).
- 2. On the Work With Batch Versions form, select the version.

- 3. On the Version Prompting form, choose Data Selection and click Submit.
- 4. On the Data Selection form, choose Date Updated and make it greater than the date of the last package build, and click OK.
- 5. After the batch process has completed, copy the refreshed data dictionary specifications from your local b7/path code/spec directory to the enterprise server that stores the master data dictionary in a relational database. The file transfer process is site-dependent and varies according to enterprise server platform. The transfer process should take into account the differences in byte alignment between the workstation and server platforms.

# Refreshing the Data Dictionary

The global update batch process completely refreshes the data dictionary from the relational format (publisher data dictionary) to the replicated specification tables. This program starts with empty replicated tables; therefore, any deletions made to the relational tables are reflected in the replicated specification tables.

This application creates the new specification tables under the administrator's local b7 directory; therefore, make sure you have an extra 50 MB on the drive where OneWorld resides, and 100 MB on your C: drive for swapping. This process takes four hours. After the system completes the refresh, you see the following:

```
b7

dddict.ddb [new tables]
dddict.xdb
ddtext.ddb
ddtext.xdb
path code name
spec
dddict.ddb [old tables]
dddict.xdb
ddtext.xdb
ddtext.xdb
ddtext.xdb
```

# To replicate all changes (Global Update)

- 1. From a workstation, on the Data Dictionary Design menu (GH951), choose Recreate Replicated Data Dictionary (R92TAM).
- 2. Run version XJDE0001.
- 3. Copy the new data dictionary specification files to the server. The file transfer process is site-dependent and varies according to enterprise server platform. The transfer process should take into account the differences in byte alignment between the workstation and server platforms.

**Caution:** Avoid having two separate data dictionaries. Typically, you should have one data dictionary that your DEVB731 and PRODB731 path codes share.

However, if you make changes to data items that applications use in the live production environment, and these changes will cause those applications to break, then you will need to have a separate data dictionary for your development path code. Under most circumstances, data dictionary changes made after going "live" with OneWorld are to add new items and modify items that are used for applications still under development. If you must have two data dictionaries, then you are using replication in a way that J.D. Edwards has not tested. J.D. Edwards strongly recommends that if you do have a separate data dictionary for the DEVB731 and PRODB731 path codes, you should set up data dictionary replication only for the PRODB731 data dictionary.

# **Troubleshooting the Data Dictionary**

The following are questions that you might have about how the data dictionary operates:

Issue	Resolution
Why are my results from running logic locally different from running it on the server?	The TAM values on your workstation might not be the same as the values on the server.
The values that I see when I inquire on the data dictionary do not seem to be used by the applications? Why is that?	The values in the server RDB and your local TAM specs may be different.
How can I be sure the values that I see on an inquiry are being used by my application?	When you inquire on a data dictionary item in the data dictionary application, you are viewing the RDB copy. The data dictionary in TAM format is used at runtime. To ensure that the values that you see on inquiry are the ones being used, click OK after looking at the data item in question. This will bring the values from the RDB into your local TAM specs. This process will not affect the server TAM specs.

# Synchronizing WorldSoftware and OneWorld Data Dictionaries

This topic only applies to customers with coexisting WorldSoftware and OneWorld installations.

You must separately maintain the OneWorld data dictionary and the WorldSoftware data dictionary. This means that any changes that you make to the OneWorld data dictionary you also need to make in the WorldSoftware data dictionary, and vice versa. To help you maintain parity between the two data dictionaries, J.D. Edwards provides a batch process that compares the WorldSoftware data dictionary on the AS/400 with the OneWorld data dictionary, as follows:

- If an item is in the WorldSoftware data dictionary but not in OneWorld, this process adds it to OneWorld.
- If an item is in OneWorld but not in WorldSoftware, the process prints this information on an exception report. You must either add the item to the WorldSoftware data dictionary or delete the item from the OneWorld data dictionary.
- The process replaces the glossary information, row headings, and column headings in OneWorld with that information from WorldSoftware.
- Item specifications that both WorldSoftware and OneWorld use, such as data item size, system code, or decimal places, are overwritten in OneWorld with information from WorldSoftware.

The two data dictionaries should not get out of synch if you are adding and changing items to both data dictionaries. However, for integrity reasons, you should run this report, first in proof mode and, if necessary, in update mode to ensure parity.

# To synchronize WorldSoftware and OneWorld data dictionaries

- 1. Sign onto the AS/400 WorldSoftware, and select the environment where the WorldSoftware data dictionary resides.
- 2. Select DREAM Writer, Versions List.
- 3. Enter Form P99800, and select Version XJDE0001.
- 4. In Processing Options, enter the library that contains the WorldSoftware data dictionary and the library that contains the OneWorld data dictionary.

To start the update, enter 1 for update mode. To review the update before the process actually begins, enter 0 for proof mode.

The update process takes about 30 minutes. It produces reports with the following information:

- Data items added to OneWorld
- Items in OneWorld that are not in WorldSoftware
- Differences found

# **Updating Display Decimals**

You can change the position of the display decimal for the quantity field class. Data items that belong to the QTYINV data item class come with the display decimal set at zero, but you can change the display decimal to any number up to eight. For example, if you change the display decimal to four, instead of seeing 100, you would see 100.0000.

**Caution:** You should only change the display decimal value in a CRP environment before any live production data is entered. This is because OneWorld does not have a data conversion feature, so if users change display decimals *after* users have entered data, the data entered before changing the display decimals will be wrong.

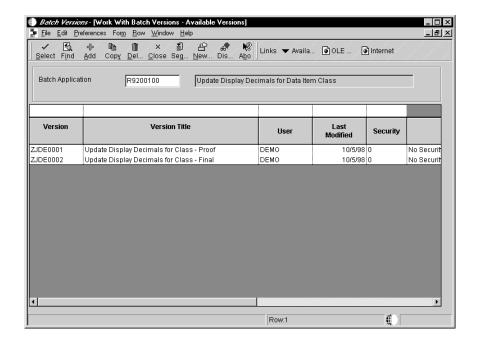
As with any data dictionary change, when you update display decimals, your replication method (batch or workstation) will replicate the changes throughout your enterprise.

## **Before You Begin**

☐ Turn off data replication by disabling the publishers or by turning off replication for the DDDICT and F92\* tables. Otherwise, OneWorld could create hundreds of replication messages. See *Enabling and Disabling Publishers and Subscribers* in the *Data Replication* section.

# To update display decimals

1. On the System Administration menu (GH9011), choose Batch Versions (P98305).



- 2. On the Work With Batch Versions form, type R9200100 in the Batch Application field and then click Find.
- 3. Choose one of the following versions and click Select:
  - Update Display Decimals for Class Proof

The proof version produces only a report of what the process would do if run in final mode.

Update Display Decimals for Class - Final

The final version actually makes the changes.

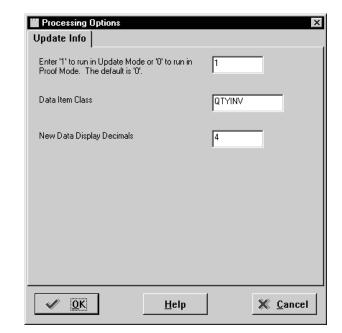
- 4. On the Version Prompting form, click Data Selection, and then click Submit.
- 5. On the Data Selection form, create the following statement:

If BC Data Item Class (F9210) = "QTYINV"

**Important:** QTYINV is the only data item class for which you can modify display decimals. If you modify other data item classes, you must research and test how the modifications impact OneWorld. Also, if you modify which data items reside in the QTYINV data item class, you must research and test how the modifications impact OneWorld.

6. Click OK.

If you changed the Data Selection statement, first click Update, then click OK.



The Processing Options form appears.

- 7. Complete the following fields:
  - Type '1' to run in Update Mode or '0' to run in Proof Mode
  - Data Item Class
  - New Data Display Decimals
- 8. Click OK.
- 9. On each workstation, delete the glbtbl.xdb and glbtbl.ddb specification files, found in the b7\path code\spec directory.

**Note:** If your enterprise is set up for data replication, the decimal display changes are pushed out to users automatically. If your enterprise is not set up for data replication, complete the following step to make sure users receive the changes.

10. To push the display decimal changes out to users, run R92TAM on the server on which the changes were made.

Field	Explanation
Enter '1' to run in Update Mode or '0' to run in Proof Mode	<ul> <li>The values are:</li> <li>1 runs the batch process in Update Mode, which updates OneWorld with the new display decimal</li> <li>0 runs the batch process in Proof Mode, which allows you to preview the change before updating OneWorld</li> </ul>

Field	Explanation
Data Item Class	Enter the data item class you want to change, such as CURRENCY or QTYINV.
New Data Display Decimals	Enter a number that represents how many decimals you want OneWorld to display.

# **Object Management Workbench Configuration**

The Object Management Workbench (OMW) is the first change management system for OneWorld development. Before this system, all change management activities had to be performed manually.

The Object Management Workbench uses an integrated and simplified graphical user interface for OneWorld development to provide better control of OneWorld Objects, especially Object Librarian objects.

The three Object Management Workbench systems are:

System	Description
Graphical User Interface (GUI)	Unifies all development under an intuitive interface.
Configuration System	Enables an administrator to control all development from a central location and specify permissions.
Logging System	Automatically tracks all program changes.
_	n focus on the Configuration System and provide the afiguring the Object Management Workbench:
Object Management	Workbench overview
☐ Understanding Obje	ct Management Workbench configuration
☐ Configuring user rol	es and allowed actions
☐ Configuring OMW f	unctions
Configuring activity	rules
☐ Configuring object s	rave locations
☐ Configuring notifica	tion subscriptions
☐ Working with logs	
☐ Configuration works	sheets

☐ Project promotion life cycle

**Note:** This section describes how to use only the Object Management Workbench Configurator application. For information about using the Object Management Workbench itself, see the *Object Management Workbench* section in the *OneWorld Development Tools Guide*.

# Object Management Workbench Overview

The purpose of this chapter is to provide an overview for administrators who are responsible for configuring the Object Management Workbench. It is important to have a basic understanding of Object Management Workbench concepts before using the Configuration application. For more detailed information about using the Object Management Workbench itself, see *Object Management Workbench* in the *OneWorld Development Tools Guide*.

The Object Management Workbench (OMW) is a software change management system designed to provide better overall control of the development process. The OMW incorporates several new concepts, which are defined in this chapter:

Projects
Default Projects
User Roles
Allowed Actions
Tokens

# **Projects**

A OneWorld project consists of a group of OneWorld objects or Object Management Workbech projects that have been created or modified by a developer to complete a task. All work on objects within OneWorld must be done within the context of a project. When a project's status is advanced, objects can be automatically transferred between administratively defined path codes or data sources.

# **Default Projects**

When you run the Object Management Workbench for the first time, a default project is created and tagged with your user ID. The default project is your personal project that can be used for development and research.

You can use default projects to do the following:

Develop objects that are later moved into a regular project

- Store objects to be added to a project at a later time
- Automatically store objects worked on outside of OMW

The default project is similar to a project, except a default project's project status never changes. Therefore, you cannot use a default project to transfer objects.

## Moving Objects from the Default Project to an Existing Project

The Object Management Workbench makes it easy to move objects from the default project to existing projects. To transfer, you essentially open the default project in the project list, select the object you want to move, and then drag the object to its destination project in the project list. You can also move multiple objects between projects using the multi-move feature. For more information on moving multiple objects see see *Object Management Workbench* in the *OneWorld Development Tools Guide*.

Remember that all the work you do in the Object Management Workbench is done in the context of a project. You must first select a project to work on, add an object to it, then work on the added object.

#### Using the Default Project for Object Research and Development

You may want to evaluate an object or research an issue before you assign it to an existing project or create or new project for it. To do this, add the object to your default project for research and prototyping. If you decide to implement your change, you can create a project and move the object into it from your default project, or move the object to an existing project.

#### Object Librarian and Non-Object Librarian Objects

In OneWorld, an object is a reusable entity created by OneWorld Tools based on software specifications. OneWorld objects include Object Librarian objects, such as interactive applications (APPL), batch applications (UBE), and data structure (DSTR) objects.

In Object Management Workbench, this definition has been expanded to include non-Object Librarian objects that are data source-based rather than path code-based. These objects include user defined codes (UDC), workflow, menus and data dictionary items.

To summarize, OneWorld objects now consist of the following Object Librarian and non-Object Librarian objects:

Object Librarian Objects:

- Batch applications
- Business functions

- Business views
- Data structures
- Interactive applications
- Media objects
- Tables
- Business function libraries

#### Non-Object Librarian Objects:

- Data dictionary items
- User Defined Code items
- Workflow items
- Menus

#### Using the Default Project to Manage Non-Object Librarian Objects

Non-Object Librarian objects can be accessed outside of the Object Management Workbench. If you access objects such as versions, UDCs, menus, workflow data or the RDA outside of the Object Management Workbench, these objects are added to the default project. Any changes you make to these objects must be tracked and managed through the default project. Modifications to these non-Object Librarian objects are always logged.

If you want to advance your changes, use Object Management Workbench to move the object from the default project to a project.

#### **User Roles**

When you assign users to a project, you must assign them user roles. The user role defines the user's function within the project organization. When defining user roles, you specify a User Defined Code value or job title for roles that can be played on a project. You can assign either pre-defined user roles or create your own user roles.

See the chapter *Configuring User Roles and Allowed Actions* in this section for more information about user roles.

#### **Allowed Actions**

Allowed actions are rules that define the actions that may be performed by a user who has been assigned a certain user role. You set up these rules for each user role, object type, and project status by using the Object Management

Workbench Configuration program. See the chapter *Configuring User Roles and Allowed Actions* in this section for more information.

#### **Tokens**

All Object Librarian objects use tokens to minimize the possibility of one user overwriting another user's changes to the same object. The token management system organizes application development by providing a single checkout environment. Tokens provide a change control solution in a system that does not support merging or multiple versions of object specifications.

The token management system controls modifications to Object Librarian objects. Under this scheme:

- A project must hold a token for the object before the object can be checked out.
- A project must currently have the token before the associated object can be checked in.

There is only one token per object per release. The project retains the token until it reaches a project status transition that orders the token's release in its project status activity rules.

You can do the following while your project holds the token:

Action	Description
Allow Another Project to Inherit the Token	This forces both projects to be advanced together as if they are one project and allows multiple fixes to be applied to an object.
Switch the Token to Another Project	The project donating the token is returned to the queue as the first project waiting for the token when the new project is given the token. This allows an emergency fix to be applied immediately. Token switching should be restricted to a specific user role to ensure security of the objects.

up tokens for release at a predefined object transfer

Action	Description
Release the Token	You can release the token and allow the next project in the queue to get the token. The token can be released manually or configured to be released when a project advances status. The token can be released as early as the first project status change after programming project status or as late as when the project is closed. Configure token release according to object type. Some object types, such as business functions, can hold their tokens longer, while other object types can give up their tokens earlier. Also, set
	object types can give up their tokens earlier. Also, set

Configuring object transfer activity rules to release tokens must be based on the development organization's change control procedures. If it is not, there is real risk of one developer wiping out the changes of another developer.

point.

# Understanding Object Management Workbench Configuration

The Object Management Workbench hides many of the object management tasks users had to perform before. Much of this automation requires careful configuration by the system administrator through the Object Management Workbench's configuration program.

This chapter describes the following configuration topics:
☐ Configuration options
☐ Configuration process flow
☐ Activity rules
☐ Allowed actions
☐ Project and object logging
☐ Project constants
☐ Object save locations
☐ Notification subscriptions
☐ Object action notifications
☐ Application and user role security
☐ Selecting a configuration option

# **Configuration Options**

The Object Management Configuration application enables you to configure the following options:

Option	Description
Constants	Enables you to set general constants pertaining to OMW projects.

Option	Description
SAR System Integration	Enables you to disable SAR system integration with the Object Management Workbench, and thus with OneWorld Development Tools. If you have the J.D. Edwards SAR system with WorldSoftware, you can integrate OMW with the WorldSoftware SAR system.
Logging System	Enables you to specify the project and object events to be logged. You can also disable development, or allow development but disable transfers, in the event that logging fails.
Object Action Notification	Enables you to enable and disable Object Action Notification, which sends a notification message when an action such as checkin or checkout is performed on an object.
Notification Setup	Enables developers to subscribe to be notified when actions are performed on an object.
<b>Activity Rules</b>	Enables you to add and modify project statuses and object transfer activity rules.
User Roles	Enables you to maintain user roles.
Allowed Actions	Enables you to assign to a user role the actions allowed for each object type during a specific project status.
Save Locations	Enables you to add, modify, and delete the save locations for objects.

# **Configuration Process Flow**

The following list provides a recommended process flow for using all the Object Management Workbench configuration tools. The first three steps require advance preparation. These are:

- Assigning user roles
- Applying allowed actions to users
- Setting up project status rules and object transfer rules

Before configuring these functions, make sure you understand user roles, allowed actions, project status rules, and object transfer rules. Then complete the

configuration worksheets provided in *Configuration Worksheets* to help organize and speed up configuration.

Here is the recommended process flow:

<b>Configuration Function</b>	<b>Procedure Location</b>
<b>Assigning User Roles</b>	See Configuring User Roles and Allowed Actions.
Applying Allowed Actions to Users	See Configuring User Roles and Allowed Actions.
Disabling SAR Integration with Object Management Workbench	See Configuring OMW Functions.
Setting Up Project Constants	See Configuring OMW Functions.
Setting Up Project Status and Object Transfer Rules	See Configuring Activity Rules.
Adding, Modifying and Deleting Object Save Locations	See Configuring Object Save Locations.
Controlling Development in the Event of Logging Failure	See Configuring OMW Functions.
Controlling Logging Detail	See Configuring OMW Functions.
Enabling or Disabling Object Action Notification	See Configuring Notification Subscriptions.
Adding, Modifying and Deleting Notification Subscriptions	See Configuring Notification Subscriptions.
Viewing Major and	See Working with Logs.

**Detail Logs** 

# **Activity Rules**

There are two types of activity rules: Project Status Activity Rules and Object Transfer Activity Rules.

Project status activity rules define the possible paths an Object Management Workbench project can take. For a given project status, these rules define the possible next project statuses to which the project can be advanced.

For each project status activity rule, there may be one or more object transfer activity rules. Each object transfer activity rule defines a FROM and TO location where objects of this type are moved from and to for a specific software release.

For example, one object transfer activity rule can specify all APPL objects get transferred from the DV7333 location to the PY7333 location during a specified project status change.

### **Allowed Actions**

The Allowed Actions form enables you to assign allowed actions to user roles for each object type during a specific project status. You must first create the user role before configuring allowed user actions.

Utilizing allowed actions helps administrators to restrict actions that users playing a specific role can perform.

# **Project and Object Logging**

Object Management Workbench logging tracks information about projects and objects. A major log is created whenever:

- A project is created, copied, or deleted
- The project status is changed
- A new or existing object is added to or removed from a project
- An object is created, copied, or deleted
- An object is checked in, checked out, saved, restored, transferred, or retrieved

For every significant step or event within these actions, a detail log is created and attached to the major log record.

## **Project Constants**

The Object Management Constants Form enables the administrator to set the following general constants pertaining to OMW Projects:

Type of constant	Description
Project Status for Users' Personal Default Projects	This is the default status assigned to a default project within the Object Management Workbench. This can be any one of the standard project status codes.
Project Status for All New Projects	This is the status that is assigned to a project when it is first created. This can be any one of the standard project status codes, or you can create a status and code for this purpose.
User Role to be Assigned to the Project's Originator	When a project is created, the originator is added as a user on that project. This project constant defines the user role assigned to the originator.

# **Object Save Locations**

The Object Save Locations form indicates the save location for Object Librarian (OL) objects. Defining the save location will allow users to transfer objects that are saved into the path code specified. Currently, only the save locations for Object Librarian objects may be defined.

# **Object Action Notifications**

The Object Action Notifications form enables you to activate or deactivate object action notification. The Object Action Notification System sends you an e-mail each time an event occurs to one of your objects, such as checkin or checkout. Object action notification is enabled by default.

# **Notification Subscriptions**

The notification system sends e-mail messages to users regarding changes to objects in the system, such as object checkins and checkouts. The Notification Subscriptions form allows you to add, delete, and modify notification subscriptions, as well as to sort notification subscription records by criteria you select.

# Application and User Role Security

You should secure the following applications using application security:

- P98230 Object Management Workbench Configuration
- R98210B Object Management Workbench Logging Purge Application
- P98231 Object Management Workbench Transfer Activity Rules Director

This topic discusses the following OMB security issues:

Securing user roles
Securing administrative updates

### **Securing User Roles**

You can prevent users from adding a user to a project by using row-level security on the F98221.puomwur field. This field contains the user role UDC code for each user in a given project.

However, all users must be able to add the following user roles when setting up a new project:

- Originator
- Supervisor
- Manager
- Developer
- QA
- Product Support

The administrator role should be secured from all but a few users. Because manager and supervisor roles cannot be secured, consider creating a product manager or similar role that can be secured. This new user role can be granted security attributes, such as being allowed to switch a token from one project to another.

### **Securing Administrative Updates**

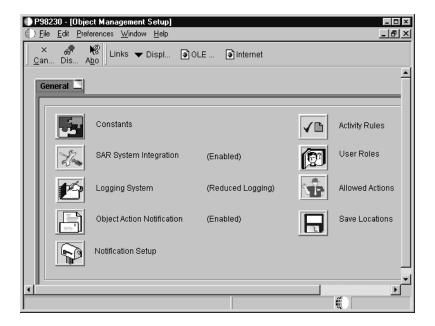
You should secure all actions, including project status change, for project statuses 40, 41, and 42 (Production Development, Transfer Production to Prototype, and Transfer Prototype to Development). These statuses allow administrators to apply fixes to objects in the Production path code and then to promote the objects back to development. The ability to do so should be limited to administrators only.

## **Selecting a Configuration Option**

All configuration options are set up through the Object Management Configuration application (P98230). You select the option you want to configure by clicking the button that corresponds to the desired option.

# To select a configuration option

1. From the Object Management Workbench menu (GH902), choose Object Management Configuration (P98230).



- 2. If necessary, click the General tab to display function options.
- 3. Click one of the following buttons to configure the corresponding function:
  - Constants
  - SAR System Integration
  - Logging System
  - Object Action Notification
  - Notification Setup
  - Activity Rules
  - User Roles
  - Allowed Actions
  - Save Locations

### **Configuration Settings Indicators**

Some of the function buttons on the Object Management Setup Form have setting indicators next to them. Settings indicators describe the current setting for the SAR System Integration, Logging System, and Object Action Notification options. The following describes the purpose of each settings indicator:

Indicator	Description
SAR System Integration Indicator	Indicates whether the SAR (Software Action Request) system is integrated with the Object Management Workbench. SAR integration is enabled or disabled.
Logging System Indicator	Indicates whether full or reduced logging of project or object events is selected.
Object Notification Indicator	Indicates whether the object notification system is enabled or disabled.

# **Configuring User Roles and Allowed Actions**

Configuring user roles and allowed actions is one of the most important OMW configuration tasks. OMW's automation relies upon an administrator spending the time to carefully configure these areas. For background information, see *Understanding Object Management Workbench Configuration* and *Configuration Worksheets*.

This chapter describes the following procedures:	
☐ Adding a user role	
☐ Modifying a user role	
☐ Deleting a user role	
☐ Setting up allowed user actions	

The following table specifies recommended allowed user actions for each user role, the project status at which these actions should be authorized, and the responsibility of a person in that user role:

Recommended Project Status	User Role	Recommended Allowed Action	Explanation
11 - New Project Pending Review	Originator	Status Change	Originator may need to advance status to 91 - Cancelled Entered in Error
	Manager, Supervisor	Update Project	Change values for the project
		Update Users	Change values for user
		Remove Users	Assign appropriate staff to project
		Status Change	Advance project to next status
21 - Programming	Developer	Add Objects	Add objects to project to fix or enhance
		Remove objects	Remove objects that were incorrectly added
		Checkout	Check out objects from server
		Checkin	Check in objects to server
		Get	Get objects from server

		Remove users	Assign appropriate testing staff to project
		Status change	Advance project to next status
25 - Rework-Same Issue	Developer	Status change	Change project to Programming status (21)
26 - QA Test/Review	QA	Get	Get objects from server
		Status change	Advance project to next status
28 - QA Test/Review Complete	Manager, Supervisor	Update project	Change values for the project
		Status change	Advance project to next status
38 - In Production	Manager, Supervisor	Status change	Advance project to next status
01 - Complete	Developer	Remove objects	Remove objects from projects at status 91 that may have been added but not removed
		Remove users	Remove user after removing objects

**Note:** You may want to allow the Manager and Supervisor roles to perform the same actions as the Developer role, in case the developer cannot perform assigned duties or needs to have work verified.

### See Also

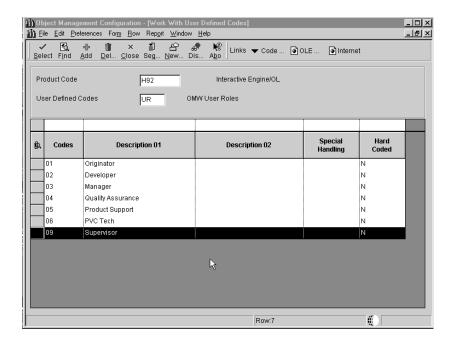
• *Configuration Worksheets* in this section for a table in which to record information specific to your setup.

# Adding a User Role

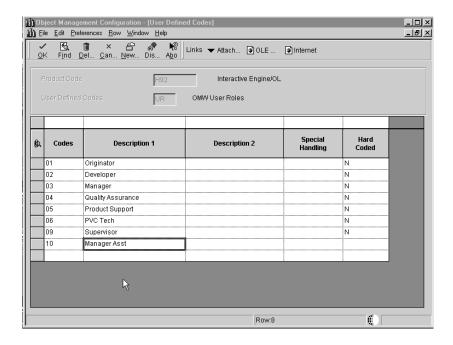
Create new user roles by completing the Work With User Defined Codes (P0004) form.

# To add a user role

1. From the Object Management Setup form, click the User Roles button.



- 2. Verify the product code and user defined code in the Product Code and User Defined Codes fields. Ensure that they are correct for the users you wish to add.
- 3. To add a new code, click Add.



- 4. In the blank row at the bottom of the list, complete one or more of the following fields:
  - Codes
  - Description01

- Description02
- Hard Coded
- User Defined Codes
- Special Handling
- Product Code
- 5. Repeat steps 3 and 4 to add more user roles.
- 6. Click OK to return to the Work With User Defined Codes form.
- 7. Click Find and verify the new user roles you added appear in the list.

Field	Explanation	
Codes	A list of valid codes for a specific user defined code list.	
	Form-specific information	
	A code of blank in a user defined code list indicates that a blank is a valid entry for the code. This means that the user defined code does not require a specific value to be assigned to the field on a form.	
	Leave the codes field blank and type a period in the last position of the Description 1 field to set up a valid code equal to blank.	
Description 01	A user defined name or remark.	
Description 02	Additional text that further describes or clarifies a field in the J.D. Edwards systems.	
Hard Coded	A code that indicates whether a user defined code is hard-coded.	
	Valid values are: Y The user defined code is hard-coded N The user defined code is not hard-coded	
	For OneWorld, a check indicates that the user defined code is hard-coded.	
User Defined Codes	A code that identifies the table that contains user defined codes. The table is also referred to as a UDC type.	
	The Record Type (alias RT) and Product Code (alias SY) fields work together to associate a user defined codes table to the UDC (alias GDC1) field. The system uses the user defined codes table to verify data that you enter in the UDC (alias KY) field on the General Description Entry form.	

Field	Explanation
Special Handling	A code that indicates special processing requirements for certain user defined code values. The value that you enter in this field is unique for each user defined code type.
	The system uses the special handling code in many ways. For example, special handling codes defined for Language Preference specify whether the language is double-byte or does not have uppercase characters. Programming is required to activate this field.
Product Code	A user defined code (UDC 98/SY) that identifies a J.D. Edwards system.

# Modifying a User Role

During a project you may need to modify user roles to change a user's job. User roles are modified through the Work With User Defined Codes form.

### To modify a user role

- 1. From the Object Management Setup form, click the User Roles button.
- 2. Select the user role you want to modify.
- 3. Double-click the first field you want to change, and modify it.
- 4. Repeat step 3 to make all modifications required.
- 5. Click Find and verify the modifications you made appear in the list.
- 6. Click OK.

Field	Explanation	
Description 01	A user defined name or remark.	
Description 02	Additional text that further describes or clarifies a field in the J.D. Edwards systems.	
Hard Coded	A code that indicates whether a user defined code is hard-coded.	
	Valid values are:  Y The user defined code is hard-coded N The user defined code is not hard-coded	
	For OneWorld, a check indicates that the user defined code is hard-coded.	

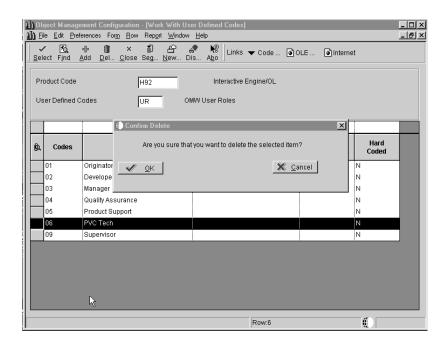
Field	Explanation
Codes	A list of valid codes for a specific user defined code list.
	Form-specific information
	A code of blank in a user defined code list indicates that a blank is a valid entry for the code. This means that the user defined code does not require a specific value to be assigned to the field on a form.
	Leave the codes field blank and type a period in the last position of the Description 1 field to set up a valid code equal to blank.
User Defined Codes	A code that identifies the table that contains user defined codes. The table is also referred to as a UDC type.
	The Record Type (alias RT) and Product Code (alias SY) fields work together to associate a user defined codes table to the UDC (alias GDC1) field. The system uses the user defined codes table to verify data that you enter in the UDC (alias KY) field on the General Description Entry form.
Special Handling	A code that indicates special processing requirements for certain user defined code values. The value that you enter in this field is unique for each user defined code type.
	The system uses the special handling code in many ways. For example, special handling codes defined for Language Preference specify whether the language is double-byte or does not have uppercase characters. Programming is required to activate this field.
Product Code	A user defined code (UDC 98/SY) that identifies a J.D. Edwards system.

# Deleting a User Role

You may want to delete a user role if you find that it is not used within your system.

### To delete a user role

- 1. From the Object Management Setup form, click the User Roles button.
- 2. Click in the cell to the left of the User Role you want to delete.
- 3. Click the Delete button.



- 4. Click OK in the Confirm Delete query.
- 5. Repeat steps 2 through 4 to delete all desired user roles.
- 6. Click Find to verify that the user roles have been deleted.
- 7. Click OK.

# **Setting Up Allowed User Actions**

The Allowed Actions Form lets you assign allowed actions to user roles for each object type during a specific project status. The following user-defined codes define allowed OMW actions involving objects:

- 02 Check-in
- 03 Check-out
- 04 Delete
- 05 Add
- 06 Copy
- 07 Install
- 08 Save
- 09 Restore
- 10 Design
- 11 Get
- 12 Remove Object from Project
- 13 Update the Project
- 16 Add an Object of the Project

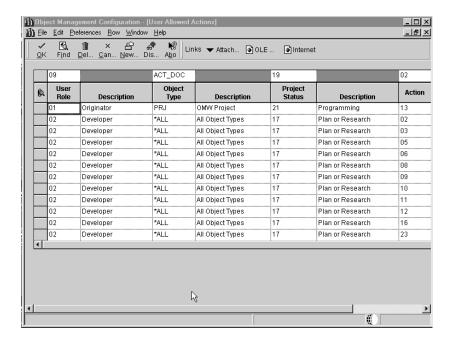
- 21 Switch Tokens
- 23 Release from Token Queue
- 30 Erase Check-out
- 38 Status Change

For example, if you want the developer to be allowed to check in all object types when the project is at project status 21, you would enter 02 - Developer in the User Role field, \*ALL in the Object Type field, select 02 - Checkin in the Allowed Action field, and 20 - Programming in the Project Status field.

**Note:** Before setting up allowed actions you must add the user role to the User Roles UDC by using the User Defined Code Form.

# To set up allowed user actions

1. From the Object Management Setup form, click the Allowed Actions button.



- 2. Click Find to display previously defined user actions.
- 3. To create a blank row in which to add a definition, do a sort on the allowed user action to be worked upon. Complete one or more of the Query By Example (QBE) columns.
- 4. Click Find and scroll to a blank row at the bottom of the sorted list.
- 5. Complete the following fields in the blank row:
  - User Role
  - Object Type

- Project Status
- Action

**Note:** You can enter \*ALL in any field except User Role. Typing \*ALL in a field indicates that the user role selected can work with all object types, project statuses or actions.

After you complete a row, a new row appears.

- 6. Repeat this procedure until all allowed user actions are set up.
- 7. Click OK.

Field	Explanation
User Role	User Roles are set up for all the kinds of players that can participate in a project. The role essentially defines the user's function within the project organization. Project managers will generally assign a user to a project. When they do so, they will indicate what role that user will be playing. Examples of User Roles are:  01 Originator: Personnel that originated the project.  02 Developer: Personnel that actually create the project.  03 Manager: Personnel that manage the project.  04 Quality Assurance: Personnel that check the project's functionality.  05 Administrator: Personnel that configure project status, user roles, objects, etc.  06 PVC Tech: Personnel that are responsible for maintaining the version control over the OneWorld Development Tool releases.
	Form-specific information
	Allows you to set up actions that can only be performed by users playing a certain role on a project.

Field	Explanation
Object Type	In OneWorld, an object has traditionally been a reusable entity based on software specification created by the OneWorld Tools. These objects included Object Librarian Objects, such as interactive applications (APPL), as well as batch applications (UBE), and data structure (DSTR) objects. In OMW, we have expanded this definition to include other Non Object Librarian type objects or data source based rather than path code based objects. These include User Defined Controls (UDC), Workflow, ActivEra, Menus, and Data Items. OL Objects: <ul> <li>Batch Applications</li> <li>Business functions</li> <li>Business views</li> <li>Data structures</li> <li>Event rules</li> <li>Interactive applications</li> <li>Media Objects</li> <li>Data dictionary items</li> <li>UDC items</li> <li>Workflow items</li> <li>Menus</li> </ul>
	Form-specific information
	Actions can apply to specific Object Types. Select the Object Type for which you want to set up an allowed action.

Field	Explanation
Project Status	When a default project is added, this will be the status at which it is added. This can be one of the project status codes, which are:  01 Complete  11 New Project Pending Review  21 Programming  25 Rework-Same Issue  26 QA Test/Review  28 QA Test/Review Complete  38 In Production  40 Production Development  41 Transfer Production to Prototype  42 Transfer Prototype to Development  45 Pristine Get  91 Cancelled Entered in Error
	For any other project that is added, other than the default, this will be the status at which the project is added. This can be any one of the project status codes, which are listed above.
	This project status should be the starting point in the Status Activity Rules as defined in Object Management Configuration Application (P98230).
	Form-specific information
	This indicates the status the action allowed. You can enter *ALL to indicate the action is allowed for all project statuses.

Field	Explanation
Action	Defines the type of action the user can execute on the object type that was selected, when the project is at the status indicated. The following are the codes defining an Object action:  02 Check-in 03 Check-out 04 Delete 05 Add 08 Save 09 Restore 10 Design 11 Get 12 Remove Object From Project 13 Update a Project 16 Add Object to Project 21 Switch Token 06 Copy 23 Force Release From Token Queue 30 Erase Check-out 38 Status Change
	The allowed Actions define the action that will be performed for the Transfer Activity Role. For example, you can setup the transfer rules to indicate whether it is valid to only transfer objects into a location or if it is valid to transfer into and delete objects from that location. This would mean, if the rule on a status change from 23 to 24 had the action Transfer and Delete, the objects the user has flagged to be deleted will be deleted from the defined "To" location and the other objects will be transferred from the "From" location to the "To" location. If the rule instead said on status change 23 to 24, objects would on be allowed to transfer the location and the deletion would not be performed.
	Form-specific information
	Indicate the allowed action for indicated user role. You can enter *ALL to indicate that the user role can perform all actions.

# **Configuring OMW Functions**

This chapter describes the following configuration functions:
☐ Disabling SAR integration
☐ Controlling logging detail
☐ Controlling development in the event of logging failure
☐ Setting up project constants

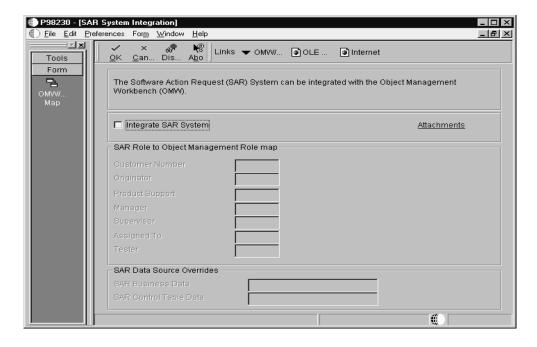
# **Disabling SAR Integration**

Most companies do not have the SAR (Software Action Request) system. You can verify that SAR integration is disabled by checking the settings indicator to the right of the SAR System Integration button on the Object Management Setup Form.

If you do not have the SAR System installed and the SAR System Integration settings indicator shows that SAR integration is enabled, you must disable SAR integration.

# To disable SAR system integration

1. Click the SAR System Integration button on the Object Management Setup form.



- 2. Make sure the Integrate SAR System option is blank.
- 3. Verify that all other fields are grayed out and deselected.
- 4. Click OK.

### **Field**

### **Explanation**

Integrate SAR System

An option that specifies whether the Object Management Workbench (OMW) allows users to associate a SAR with an OMW project. The OMW SAR integration scheme allows OMW to update the SAR system. It does not allow the SAR system to update OneWorld. When this option is turned on, the user must setup the integration points in the User Defined Code H92/SI. The OMW SAR map exit, on the SAR Integration form, brings up the Work With User Defined Codes form for this UDC.

### The OMW can:

- Change status of the associate SAR when the user changes the status of a project.
- Update the appropriate SAR section when the user adds an object to a project.
- Add users from the SAR to the associated project in their appropriate roles.

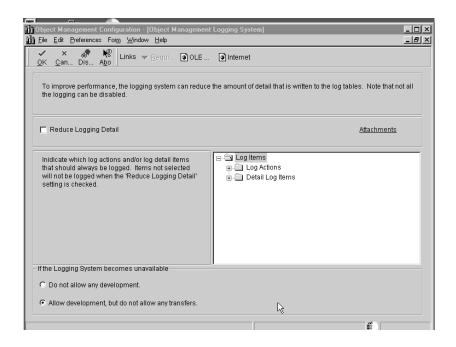
Field	Explanation
SAR Business Data	System Business data Source, if populated, and SAR Integration is turned on, the Object Management Workbench (OMW) uses the data source from this field to open the Work Order and Address Book tables when dealing with the SAR System. If you leave this field blank, (regardless if SAR Integration is turned on) OMW uses OCM to open these tables when dealing with the SAR System. The tables that are be mapped are: F0001, F0006, F0101, F0111, F01131, F01132, F01133, F069116, F0901, F0911, F48001, F48002, F4801, F4802, F4826.
SAR Control Table Data	System Control Data Source, If populated, and SAR Integration is turned on, the Object Management Workbench (OMW) uses this data source to open the Next Number and User Defined Code tables when dealing with the SAR System. If you leave this field blank, (regardless if SAR Integration is turned on) the OMW uses OCM to open these tables when dealing with the SAR System.
User Role	User Roles are set up for all the kinds of players that can participate in a project. The role essentially defines the user's function within the project organization. Project managers will generally assign a user to a project. When they do so, they will indicate what role that user will be playing. Examples of User Roles are:  01 Originator: Personnel that originated the project.  02 Developer: Personnel that actually create the project.  03 Manager: Personnel that manage the project.  04 Quality Assurance: Personnel that check the project's functionality.  05 Administrator: Personnel that configure project status, user roles, objects, etc.  06 PVC Tech: Personnel that are responsible for maintaining the version control over the OneWorld Development Tool releases.

# **Controlling Logging Detail**

The Object Management Logging System form enables you to specify which project and object events you wish to have logged.

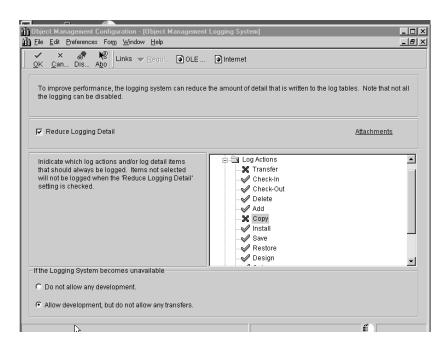
# To control logging detail

1. From the Object Management Setup form, click the Logging System button.



- 2. Choose the Reduce Logging Detail option. A check mark appears next to the option selected.
- 3. Double-click the Log Actions and Detail Log Items folders.
- 4. Double-click items for which you do not want to log details.

A red X appears next to the deselected item.



- 5. Repeat step 3 to deselect all unwanted log detail items.
- 6. Click OK.

Reduce Logging Detail	If checked, the Object Management Workbench (OMW) will reduce the logging detail for everyone in the enterprise. The reduced logging will eliminate most of the detail logging but will still keep a log of the major events
	such as object transfers, check-ins, and deletes.

# Controlling Development in the Event of Logging Failure

The Object Management Logging System form also enables you to disable development or to allow development but disable transfers if logging fails.

# To control development in the event of logging failure

- 1. On the Object Management Setup form, click the Logging System button.
- 2. To disable development if logging fails, choose the Do not allow any development option.
- 3. To permit development but disable object transfers in the event of a logging failure, choose the Allow development but do not allow any transfers option.

**Note:** The Allow development but do not allow any transfers button is selected by default.

4. Click OK.

Do not allow any development	If the database the logging tables fail for any reason, it is still possible to allow users to continue working. However, users will never be able to transfer objects while the logging system is down. This will ensure the integrity of production environments.
Allow development, but do not allow any transfers	If the database the logging tables fail for any reason, it is still possible to allow users to continue working. However, users will never be able to transfer objects while the logging system is down. This will ensure the integrity of production environments.

# **Setting Up Project Constants**

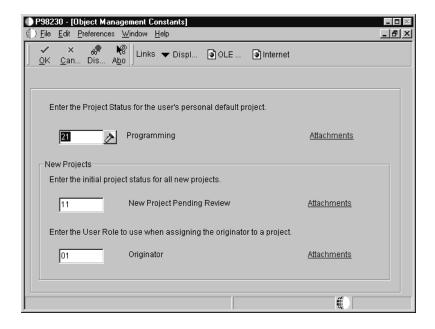
The Object Management Constants form enables you to set general constants pertaining to OMW Projects. These project constants are:

- Project status for users' personal default projects
- Project status for all new projects

User role to be assigned to the project originator

## To set up project constants

1. Click the Constants button on the Object Management Setup form.



- 2. To enter a project status for a user's personal default project, click the visual assist for the following field:
  - Enter the Project Status for user's personal default project
- 3. Double-click a project status.
- 4. To enter the initial project status for all new projects, click the visual assist of the following field:
  - Enter the initial Project Status for all new projects.
- 5. Double-click a project status.
- 6. To enter the User Role to use when assigning the originator to a project, click the visual assist for the following field:
  - Enter the User Role to use when assigning the originator to a project.
- 7. Double-click a project status.

**Note:** You can click on the Attachments buttons next to the three fields to view their respective attachments.

# **Configuring Activity Rules**

The Activity Rules button on the Object Management Setup form enables you to set up both project status activity rules and object transfer activity rules. Project status activity rules define the different activities that occur during a project development cycle. Object transfer activity rules work in conjunction with project status activity rules, and define the From and To locations for moved objects.

This chapter contains the following procedures:

Setting up project status activity rules

Setting up object transfer activity rules

# **Setting Up Project Status Activity Rules**

The Project Status Activity Form allows you to set up statuses for the project as development progresses from one phase to the next. For example, the project might move from a programming phase to a manager review phase. For each of these transitions you will define the following:

- Whether or not this project status rule is active
- The System Role this project status transition applies to
- The related To project status
- The related From and To SAR\* statuses

Complete the From and To SAR status only if you have SAR integration turned on.

### See Also

• *Configuration Worksheets* in this section for a table in which to record information specific to your setup.

#### **Default Status Defaults**

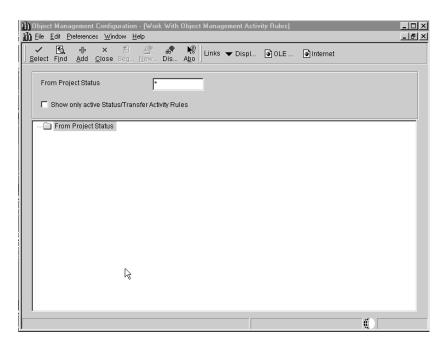
The installed project statuses and their definitions are:

• 01 - Complete

- 11 New Project Pending Review
- 21 Programming
- 25 Rework-Same Issue
- 26 QA Test/Review
- 28 QA Test/Review Complete
- 38 In Production
- 40 Production Development
- 41 Transfer Production to Prototype
- 42 Transfer Prototype to Development
- 45 Pristine Get
- 91 Cancelled Entered in Error

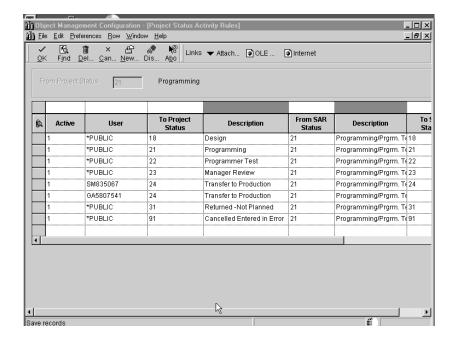
## To set up project status activity rules

1. From the Object Management Setup form, click the Activity Rules button.



- 2. Click Find. All available From project statuses appear.
- 3. Click on the From Project Status for which you want to set up one or more To project statuses.
- 4. Click Select.

Project Status Activity Rules lists all valid To project statuses for the From project status you selected. The current project status appears in the From Project Status field.



- 5. Scroll to the blank row at the bottom of the list. Complete the following fields:
  - Active
  - User

This field can be used to allow only specific users or only users who are members of a specified group to perform a status change. To make the rule available to everyone, user \*PUBLIC in this field.

- To Project Status
- From SAR Status

Complete for projects having SARs and only if you have SAR integration turned on. If SAR integration is disabled, these columns are disabled.

To SAR Status

Complete for projects having SARs and only if you have SAR integration turned on. If SAR integration is disabled, this column is disabled.

A blank row appears below the row you completed.

- 6. Repeat step 5 to set up or modify other To project statuses for this particular From Project Status.
- 7. Click OK when you are done.

- 8. Select the next From Project Status. Repeat steps 5 through 7 to set up project activity rules for each remaining From Project Statuses.
- 9. When all project activity rules are complete, click OK to return to the Work with Object Management Activity Rules Form.
- 10. Click Close.

Field	Explanation
Active	Allows for the user to indicate if the project status rule is active or not. If it is not active it will not be utilized by the OMW engine.
From Project Status	This can be one of the project status codes, which are:  01 Complete 11 New Project Pending Review 21 Programming 25 Rework - Same Issue 26 QA Test/Review 28 QA Test/Review Complete 38 In Production 40 Production Development 41 Transfer Production to Prototype 42 Transfer Prototype to Development 45 Pristine Get 91 Cancelled Entered in Error
To Project Status	Indicates an allowed next status for a project that is currently at the From status to be advanced to.
From SAR Status	When the project is at the From Status and is moved to the To Status, the corresponding SAR will be at this status.
To SAR Status	When the project is at the From Status and us moved to the To Status the SAR will be advanced to this status.

# **Setting Up Object Transfer Activity Rules**

You must configure object transfer activity rules for each object type used in a project that you want to perform an action on.

For each object type you want to perform an action on, you must define the following information:

- Determine project statuses when users can check in, check out, and get objects. Getting an object means copying its specifications to your work area without checking it out.
- Determine at which status change you would like objects to be transferred.
- Determine project statuses when object tokens are released.

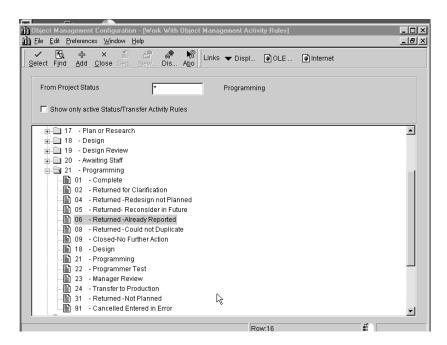
The following object location tasks must be performed when setting up object transfer activity rules:

- Define FROM and TO transfer locations for each object type at each project status transition -- for example, when project status 21 (development) changes to project status 26 (prototype). In this example, objects are transferred from DV7333 to PY7333.
- Define checkout and get locations for Object Librarian object types.
- Define checkin locations for Object Librarian objects.

**Note:** Transfer activity rules can occur in any order. For example, you might have one status change that will require more than one object transfer. If you expect an object to transfer from DV7333 to PY7333, and then to PD7333, you will want to set up rules to transfer the object from DV7333 to PY7333 and from DV7333 to PD7333, because the object could be retrieved in any order.

# To set up object transfer activity rules

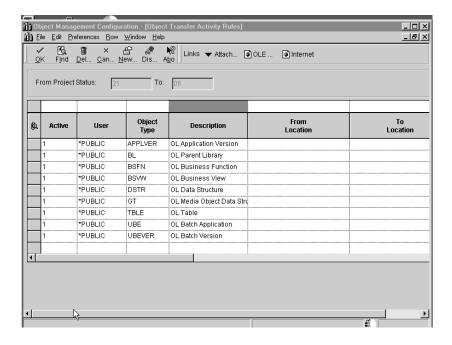
- 1. From the Object Management Setup form, click the Activity Rules button.
- 2. Click Find to display all available project statuses.



- 3. Double-click on the From Project Status folder for which you want to set up object transfer activity rules.
- 4. Click one of the related To project statuses.

This field defines the To Project Status, which completes the From and To Project Status transition for which you want to configure object transfer activity rules. For each From and To Project Status transition, you can create multiple object transfer activity rules for different object types.

#### 5. Click Select.



- 6. Scroll to the blank row at the bottom of the list. Complete the following fields for the object type desired:
  - Active
  - User

This field can be used to allow the activity rule to apply only specific users or only users who are members of a specified group. To make the rule available to everyone, use \*PUBLIC in this field.

Object Type

**Note:** \*ALL may not be used when defining transfer activity rules.

- From Location
- To Location

**Note:** Object Librarian objects use path codes for the From Location and To Location values, whereas non-Object Librarian objects use data source values. For Versions, if a path code is entered, the F983051 record and the specs for the version are transferred (for batch versions), and if a data source is entered, just the F983051 record is transferred between the defined locations.

#### From Release

This field contains the release level of OneWorld that you are currently working on. The From Release value should be the same as the To Release value.

### • To Release

Currently not used. This field is populated with the From Release value.

- Release Token
- Allowed Action

A new blank row appears when you are done. When you set up transfer activity rules for Workflow objects, an additional form appears. Use the form to provide From and To Data Source values for the F98811 (Activity Specifications table) records.

- 7. Repeat this procedure to set up or modify other object types for this project status transition.
- 8. Click OK to return to the Object Management Activity Rules form.
- 9. Select the next From and To project status transition. Repeat this procedure to set up its object transfer activity rules.
- 10. Repeat step 9 until all object transfer activity rules are complete.
- 11. Click OK to return to the Object Management Activity Rules form.
- 12. Click Close.

**Note:** When you set up transfer activity rules for APPL objects, you must also define rules for User Override Object types so that OMW can transfer any \*PUBLIC user overrides for the APPL objects. If you do not do so, APPL objects will not transfer successfully.

Field	Explanation
From Project Status:	This can be one of the project status codes, which are:  01 Complete  11 New Project Pending Review  21 Programming  25 Rework - Same Issue  26 QA Test/Review  28 QA Test/Review Complete  38 In Production  40 Production Development  41 Transfer Production to Prototype  42 Transfer Prototype to Development  45 Pristine Get  91 Cancelled Entered in Error
То:	Indicates an allowed next status for a project that is currently at the From status to be advanced to.
Active	Allows for the user to indicate if the project status rule is active or not. If it is not active it will not be utilized by the OMW engine.
User	The user or group for which the To status is valid. If the user is not setup for a specific status as a valid To status then the may not advance the project to that status. *PUBLIC is allowed.
	Form-specific information
	The user or group for which the Transfer Active Rule is valid. For a given user during the indicated status change, the Object Management Workbench (OMW) will transfer objects for all Transfer Rules with * PUBLIC in this field. In addition, it will transfer objects for all rules that indicate that signed-on user's group and the signed-on user's ID. Note that these are not overrides. If a user defines one rule for *PUBLIC and one rule matching the user's ID for a given object type, the object will be transferred twice.

Field	Explanation
Object Type	In OneWorld, an object has traditionally been a reusable entity based on software specification created by the OneWorld Tools. These objects included Object Librarian Objects, such as interactive applications (APPL), as well as batch applications (UBE), and data structure (DSTR) objects. In OMW, we have expanded this definition to include other Non Object Librarian type objects or data source based rather than path code based objects. These include User Defined Controls (UDC), Workflow, ActivEra, Menus, and Data Items. OL Objects: <ul> <li>Batch Applications</li> <li>Business functions</li> <li>Business views</li> <li>Data structures</li> <li>Event rules</li> <li>Interactive applications</li> <li>Media Objects</li> <li>Tables Non-OL Objects</li> <li>Data dictionary items</li> <li>UDC items</li> <li>Workflow items</li> <li>Menus</li> </ul>
From Location	When the project is advanced from the From status to the To status, any object in that location of the type indicated will be moved from the From Location to the To Location. This can be a path code when the object type is an OL or specification based object or a data source when the object type is a Non OL object as a UDC or Menu.
To Location	When the project is advanced from the From status to the To status, any object in that location of the type indicated will be moved from the From Location to the To Location. This can be a path code when the object type is an OL or specification based object or a data source when the object type is a Non OL object as a UDC or Menu.
From Release	The transfer rule only applies to objects in the project that are for this release. (Objects are always tied to a release within a project). The Form and To Release fields should always be equal.
To Release	Not currently used. The To Release field will automatically be populated with the value of the From Release field.

Field	Explanation
Release Token	All projects can contain OL Objects, and these OL Objects use Tokens to minimize the possibility of one user overwritting another user's changes to an object. The token management system organizes application development by providing a single-check-out environment. With Tokens, there is no need to merge objects or set up object versions.
	Form-specific information
	You must indicate if the token on the object should be released after the project status ha changed. If you want to release the token in a situation where you do not want to actually do a transfer of specs, but just on a status change. leave the To and From Locations blank. If you do not have a release token in the status flow, the Tokens will never be released and the next developer will not be able to work on the object.
Allowed Action	Defines the type of action the user can execute on the object type that was selected, when the project is at the status indicated. The following are the codes defining an Object action:  02 Delete Only 03 Transfer and Delete 04 Check-In 05 Check-out
	The allowed Actions define the action that will be performed for the Transfer Activity Role. For example, you can setup the transfer rules to indicate whether it is valid to only transfer objects into a location or if it is valid to transfer into and delete objects from that location. This would mean, if the rule on a status change from 23 to 24 had the action Transfer and Delete, the objects the user has flagged to be deleted will be deleted from the defined "To" location and the other objects will be transferred from the "From" location to the "To" location. If the rule instead said on status change 23 to 24, objects would on be allowed to transfer the location and the deletion would not be performed.
	Form-specific information
	The allowed actions consist of the following:

# **Configuring Object Save Locations**

This chapter describes the following functions related to save locations:
☐ Creating a Save Location
Adding an Object's Save Location
☐ Modifying an Object's Save Location
☐ Deleting an Object's Save Location

# **Creating a Save Location**

During the installation process, an additional path code may not have been created to use as your OMW save location. In order to use this feature, you must create a path code where developers can save their objects while they are in development. When users perform a Save, their objects are checked into the path code defined as the save location, and when they perform a Restore, objects are retrieved from this location.

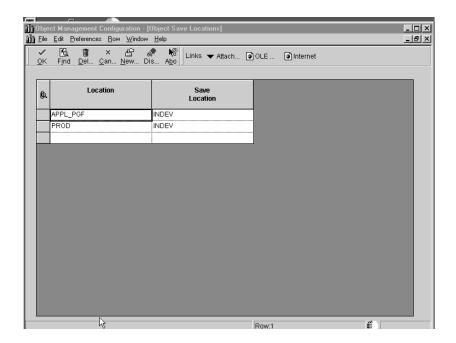
To create a save location, you create an empty path code. For information about creating a path code, see *Configurable Network Computing Implementation*, section "Path Code Setup."

# Adding an Object's Save Location

The Object Save Locations form indicates the save-off location for Object Librarian (OL) objects. Defining the save location will transfer objects that are saved into the path code specified. Currently, only the save locations for Object Librarian objects may be defined.

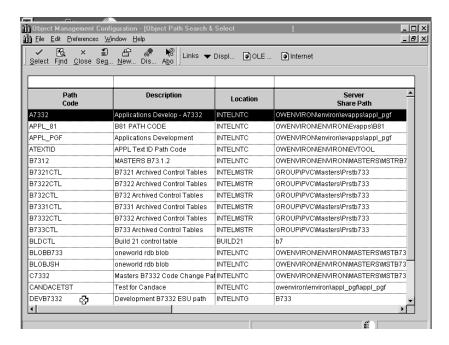
# To add an object's save location

1. Click the Save Locations button on the Object Management Setup form.

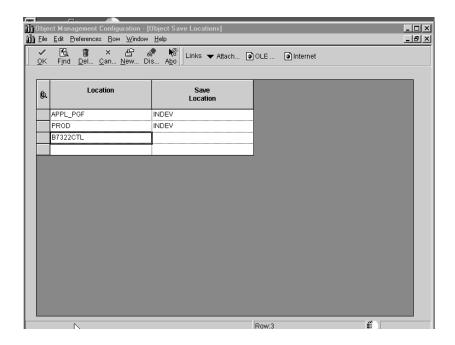


The Location column contains the names of path code where your version of OneWorld is installed.

- 2. To add a new save location, click a blank field in the Location column.
- 3. Click the visual assist button.



4. Locate and double-click the current location of the object. The Object Save Locations form reappears with your object's current location in the Location column.



- 5. In the same row, scroll to and double-click the Save Location field located to the right of the Location field clicked previously:
- 6. Click the visual assist button.
- 7. Scroll to and double-click the new save location of the object. The Object Path Save Locations form reappears with your object's new save location in the Save Location column.
- 8. Click OK.

Field	Explanation
Location	This is the path code to which the user saving specs is assigned.
Save Location	Enter the Path Code where the Objects Specifications should be saved to.

# Modifying an Object's Save Location

The Object Save Locations form enables you to modify the save location for Object Librarian objects, which may become necessary during a project.

# To modify an object's save location

- 1. Click the Save Locations button on the Object Management Setup form.
- 2. Click on the Save Location field.

- 3. Click the visual assist button.
- 4. Scroll and double click the object's new save location. The Object Save Locations form reappears with the modified object save location in the Save Location column.
- 5. Click OK.

## Deleting an Object's Save Location

If an Object Librarian object is deleted, you should also delete the object's save location in order to delete the save location completely from the system.

#### т

#### To delete an object save location

- 1. Click the Save Locations button on the Object Management Setup form.
- 2. On Object Save Locations, select the record to be deleted.
- 3. Click Delete.
- 4. Click OK in the Confirm Delete box.
- 5. Click OK.

# **Configuring Notification Subscriptions**

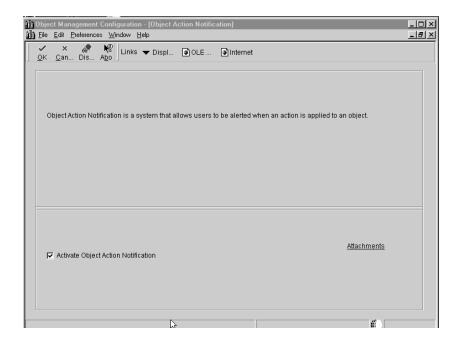
his chapter describes the following functions:
☐ Enabling or Disabling Object Action Notification
☐ Adding a Notification Subscription
☐ Modifying a Notification Subscription
Deleting a Notification Subscription
☐ Sorting Notification Subscriptions

# **Enabling or Disabling Object Action Notifications**

The Object Action Notification System is enabled by default. The Object Actions Notifications form lets you enable or disable Object Action Notification.

# To enable or disable object action notifications

1. In the Object Management Setup form, click the Object Action Notification button.



- 2. To enable object action notification, choose the Activate Object Action Notification option.
- 3. To disable object action notification, clear the Activate Object Action Notification option.
- 4. Click OK.

**Note:** Notification that users are added to or removed from projects always occurs, even when object action notification is disabled. In this situation an e-mail message is sent to the user.

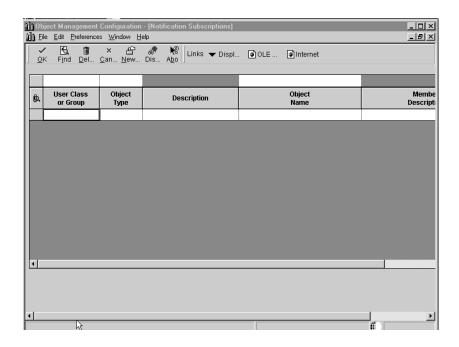
Field	Explanation
Activate Object Action Notification	A flag to enable the notification system. The notification system sends e-mail messages to users regarding actions taken on OneWorld objects by the Object Management Workbench (OMW). Use the OMW Notification Subscriptions form in the Configuration Application (P98230) to configure the notification system.

# Adding a Notification Subscription

The Object Action Notification System sends e-mail to users regarding changes to objects in the system, such as object checkins and checkouts. The Notification Subscriptions form in the OWM configuration system enables you to add notification subscriptions.

### To add a notification subscription

1. From the Object Management Setup form, click the Notification Setup button.



- 2. Click Find to display the current notification subscriptions.
- 3. Scroll to a blank row and complete the following mandatory fields:
  - User Class or Group
  - Action
- 4. Complete the following optional fields:
  - Object Type
  - Object Name
  - Reporting System Code
  - Path Code

A new row appears when you are done.

- 5. Repeat steps 3 and 4 until all notification subscriptions are added.
- 6. Click OK.

**Note:** Notification Subscriptions can be created for an action performed on the following:

1 - All objects of the specified system code.

- 2 All objects of a specified type.
- 3 All objects of a combination of 1 and 2.
- 4 A specific object name and type.

Field	Explanation
Action	Defines the type of action the user can execute on the object type that was selected, when the project is at the status indicated. The following are the codes defining an Object action:  01 Transfer 02 Checkin 03 Checkout 04 Delete 05 Add 08 Save 09 Restore 10 Design 11 Get 12 Remove Object From Project 13 Update a Project 16 Add Object to Project 21 Switch Token 06 Copy 23 Force Release From Token Queue 30 Erase Checkout 38 Status Change
	The allowed Actions define the action that will be performed for the Transfer Activity Role. For example, you can setup the transfer rules to indicate whether it is valid to only transfer objects into a location or if it is valid to transfer into and delete objects from that location. This would mean, if the rule on a status change from 23 to 24 had the action Transfer and Delete, the objects the user has flagged to be deleted will be deleted from the defined "To" location and the other objects will be transferred from the "From" location to the "To" location. If the rule instead said on status change 23 to 24, objects would on be allowed to transfer the location and the deletion would not be performed.

Field	Explanation
Object	This 200 character field contains an identifier for a OneWorld object. When used in conjunction with an Object Management Workbench Object Type (OMWOT), it can be used to uniquely identify any OneWorld object. Please see the H92/OT UDC for a list object types that can have their identifiers stored in this field.
	Object Type - You may set up notifications to take placed based on Object Type. If an object of that type is on a project that the action indicated takes place for or is moved into the path code indicated, a message will be sent to the user. Object Type must always be used in conjunction with the Object Name.
	Form-specific information
	Object Name - You may set up notifications to take place based on Object Name. If that object is on a project that the action indicated takes place for or if it is moved into the path code indicated, a message will be sent to the user. Object Name must always be used in conjunction with the Object Type.
Object Type	In OneWorld, an object has traditionally been a reusable entity based on software specification created by the OneWorld Tools. These objects included Object Librarian Objects, such as interactive applications (APPL), as well as batch applications (UBE), and data structure (DSTR) objects. In OMW, we have expanded this definition to include other Non Object Librarian type objects or data source based rather than path code based objects. These include User Defined Controls (UDC), Workflow, ActivEra, Menus, and Data Items. OL Objects: <ul> <li>Batch Applications</li> <li>Business functions</li> <li>Business views</li> <li>Data structures</li> <li>Event rules</li> <li>Interactive applications</li> <li>Media Objects</li> <li>Data dictionary items</li> <li>UDC items</li> <li>Workflow items</li> <li>Menus</li> </ul>

Field	Explanation
Path Code	The path code is a pointer to a set of OneWorld objects, and is used to keep track of sets of objects and their locations within OneWorld.
	<ul> <li>For OneWorld, a Path Code is a pointer to a specific set of objects. A Path Code is used to locate:</li> <li>Central objects - The central location where objects are deployed from. Objects such as specifications are stored in a relational database, other objects such as DLLs and sources are stored on a file server. Both types make up a Path Code.</li> <li>Replicated objects - A copy or replicated set of the central objects must reside on each client and server that run OneWorld. The Path Code indicated in the directory that these objects are located in.</li> </ul>
	Form-specific information
	For World, a code used to describe the directory path for the specified object on a given client/server address.
Reporting System Code	A code that designates the system number for reporting and jargon purposes.
	See UDC 98/SY.
	Form-specific information
	You may set up notifications to take place based on a system code. If an object is on a project and it belongs to the system code indicated, and the action indicated takes place for or the objects are moved into the path code indicated, a message will be sent to the user.
User Class or Group	<ul> <li>A profile used to classify users into groups for security purposes. Some rules for creating a User Class/Group are as follows:</li> <li>The 'Class/Group' profile must begin with * so that it does not conflict with any System profiles.</li> <li>The 'User Class/Group' field must be blank when entering a new group profile.</li> </ul>

# Modifying a Notification Subscription

The Notification Subscriptions form in the OMW configuration system enables you to modify object action notification by changing notification subscriptions.

# To modify a notification subscription

1. From the Object Management Setup form, click on the Notification Setup button.

- 2. On Notification Subscriptions, click Find to display the current notification subscriptions.
- 3. Select the fields to be modified and make your changes.
- 4. Click OK.

## **Deleting a Notification Subscription**

The Notification Subscriptions form in the OWM configuration system enables you to delete notification subscriptions.

# To delete a notification subscription

- 1. From the Object Management Setup window, click on the Notification Setup button.
- 2. On Notification Subscriptions, select the record to be deleted.
- 3. Click the Delete button.
- 4. Click OK in the Confirm Delete query.
- 5. Click OK.

# **Sorting Notification Subscriptions**

Occasionally, you may want to create a report involving notification subscriptions. The Notification Subscriptions form in the OMW configuration system allows you to sort notification subscription records according to criteria you select.

# To sort notifications subscriptions

- 1. From the Object Management Setup form, click the Notification Setup button.
- 2. Above the rule headers, click the QBE column to be filtered.

If a visual assist appears, click it and double-click your filter criteria. In other QBE columns, enter your filter criteria.

- 3. Click Find. The filtered notification subscriptions appear.
- 4. Click OK.

# Working with Logs

The Object Management Workbench contains an object management logging application. Project and object logs provide an excellent way to review the development history of projects or objects. This application also allows you to reorder log fields to customize software development reporting. This chapter describes the following:

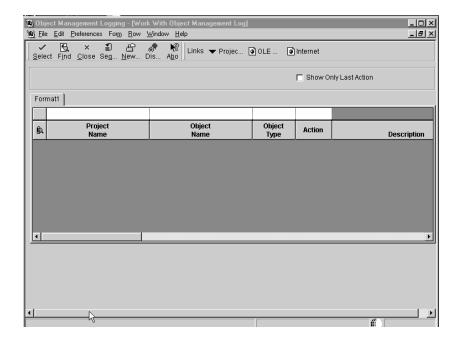
Viewing project or object logs
Locating object logs
Locating project logs
Viewing detail logs
Reordering log detail record fields
Printing logs

# **Viewing Project or Object Logs**

You view project or object logs by opening the Work with Object Management Log form. You can view all logs, view sorted logs or show only the last logging action for an object or project.

# To view project or object logs

- 1. In ActivEra Solution Explorer, type GH902 in the Fast Path field and press Enter.
- 2. Double-click Object Management Logging in the right hand window.



- 3. Perform one of the following functions:
  - Click Find to view logs for all projects and their objects in OMW.
  - Enter sorting criteria in the Query By Example (QBE) cells to filter search results, then click Find.
  - Click the Show Only Last Action button to show only the last logging action for a given project or object.
- 4. Click Close.

Field	Explanation
Object Name	This 200 character field contains an identifier for a OneWorld object. When used in conjunction with an Object Management Workbench Object Type (OMWOT), it can be used to uniquely identify any OneWorld object. Please see the H92/OT UDC for a list object types that can have their identifiers stored in this field.
	Object Type - You may set up notifications to take placed based on Object Type. If an object of that type is on a project that the action indicated takes place for or is moved into the path code indicated, a message will be sent to the user. Object Type must always be used in conjunction with the Object Name.

Object Type	In OneWorld, an object has traditionally been a reusable
	entity based on software specification created by the OneWorld Tools. These objects included Object Librarian Objects, such as interactive applications (APPL), as well as batch applications (UBE), and data structure (DSTR) objects. In OMW, we have expanded this definition to include other Non Object Librarian type objects or data source based rather than path code based objects. These include User Defined Controls (UDC), Workflow, ActivEra, Menus, and Data Items. OL Objects: <ul> <li>Batch Applications</li> <li>Business functions</li> <li>Business views</li> <li>Data structures</li> <li>Event rules</li> <li>Interactive applications</li> <li>Media Objects</li> <li>Data dictionary items</li> <li>UDC items</li> <li>Workflow items</li> <li>Menus</li> </ul>
From Project Status:	This can be one of the project status codes, which are:  01 Complete  11 New Project Pending Review  21 Programming  25 Rework – Same Issue  26 QA Test/Review  28 QA Test/Review Complete  38 In Production
	<ul> <li>40 Production Development</li> <li>41 Transfer Production to Prototype</li> <li>42 Transfer Prototype to Development</li> <li>45 Pristine Get</li> </ul>

# **Locating Object Logs**

The Object Management Logging Application has a special form for quickly locating object logs. You can view all object logs you have permission to see, view selected object logs, or see only the last logging action for object logs.

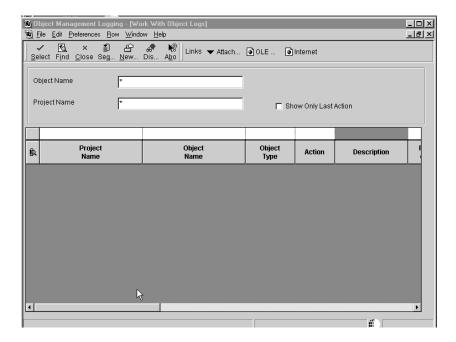
for an object action.

This field is only valid for the Project Status Change action (UDC 38). This field shows the previous status of the Project being advanced. This field will never be populated

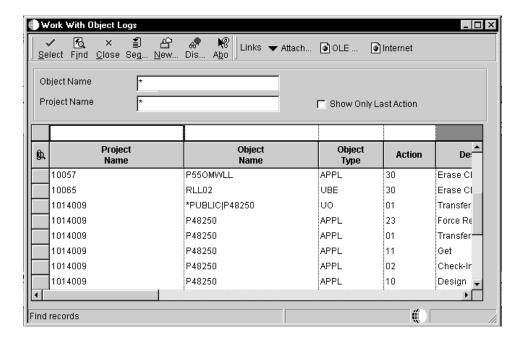
OneWorld Xe (09/00) 5–59

### To locate object logs

- 1. In ActivEra Solution Explorer, type GH902 in the Fast Path field and press Enter.
- 2. Double-click the Object Management Logging button.
- 3. In the functions menu at the top, click Form, then Object Logs.



- 4. You can use this form to do the following:
  - Click Find to show all OMW object logs.
  - Enter data in the QBE cells and click Find to narrow your search.



- Show the last logging action only by choosing the Show Only Last Action option.
- Check for object attachments by clicking the Check for Attachments button.
- 5. Click Close.

#### **Explanation**

From Data Source

These fields are only valid for the following object actions. They will be blank for project logs. Transfer - For Object Librarian Objects, this is the source and target deployment data sources for moving object specifications. For Non-OL Objects, this is the source and target main data source for moving the data records. Check-in - The "To" field will indicate the check-in deployment data source. The "From" field will contain "LOCAL." Check-in applies only to Object Librarian Objects. Check-out - The "From" field will indicate the checkout deployment data source. The "To" fields will contain LOCAL". Checkout applies only to Object Librarian Objects. Delete - The "To" field indicates the data source where the object was deleted from. The "From" data source is irrelevant for delete. Add - The "From" and "To" fields will be identical. For Object Librarian Objects, this is the deployment data source of the path code where the object was created. For Non-OL objects, this is the data source where the object was created. Copy - The "From" and "To" fields will be identical. For Object Librarian Objects, this is the deployment data source of hte path code where the object was copied. For Non-OL objects, this is the data source where the object was copied. Save - The "From" location will always be "LOCAL." The "To" location will be the deployment data source of the save path code. Save applies only to Object Librarian Objects. Restore - The "To" location will always be "LOCAL." The "From" location will be the deployment data source of the save path code. Restore applies only to Object Librarian Objects. Get - For Object Librarian Objects, the "From" field will indicate the deployment data source fo the path code "From" location. For Non-OL Objects, the "From" field will indicate the data source of the "From" location. The "To" field will always contain "LOCAL."

#### **Explanation**

From Path Code or Environment

These fields are only valid for the following object actions. They will be blank for project logs. Transfer - For Object Librarian Objects, this is the source and target path codes for moving object specifications. This field is empty for non-OL objects. Check-in - The "To" field will indicate the check-in path code location. The "From" field will contain "LOCAL." Check-in applies only to Object Librarian Objects. Check-out - The "Form" field will indicate the checkout path code location. The "To" fields will contain LOCAL". Checkout applies only to Object Librarian Objects. Delete - For Object Librarian Objects, the "To" field indicates the path code where the specifications were deleted from. For Non-Object Librarian Objects, the "To" fields indicates the environment where the object was deleted from (if applicable - this is only populated for non-OL objects if the developer deleted the object from his local environment). For Object Librarian Objects, the "From" field indicates the path code where thay were deleted locally (if applicable - delete of local specs only happen when the developer deletes an object). The "From" field is always empty for non-OL objects. Add -The "From" and "To" fields will be identical. For Object Librarian Objects, this is the path code where the object was created. For Non-OL objects, this is the environment where the object was created. Copy - The "From" and "To" fields will be identical. For Object Librarian Objects, this is the path code where the object was copied. For Non-OL objects, this is the environment where the object was copied. Save - The "From" location will always be "LOCAL." The "To" location will be the path code of the save location. Save applies only to Object Librarian Objects. Restore - The "To" location will always be "LOCAL." The "From" location will be the path code of the save location. Restore applies only to Object Librarian Objects. Get - For Object Librarian Objects, the "From" field will indicate the path code from location. For Non-OL Objects, the "From" fields will indicate the environment from location. The "To" field will always contain "LOCAL."

Field	Explanation
Object Name	This 200 character field contains an identifier for a OneWorld object. When used in conjunction with an Object Management Workbench Object Type (OMWOT), it can be used to uniquely identify any OneWorld object. Please see the H92/OT UDC for a list object types that can have their identifiers stored in this field.
	Object Type - You may set up notifications to take placed based on Object Type. If an object of that type is on a project that the action indicated takes place for or is moved into the path code indicated, a message will be sent to the user. Object Type must always be used in conjunction with the Object Name.
Object Type	In OneWorld, an object has traditionally been a reusable entity based on software specification created by the OneWorld Tools. These objects included Object Librarian Objects, such as interactive applications (APPL), as well as batch applications (UBE), and data structure (DSTR) objects. In OMW, we have expanded this definition to include other Non Object Librarian type objects or data source based rather than path code based objects. These include User Defined Controls (UDC), Workflow, ActivEra, Menus, and Data Items. OL Objects: <ul> <li>Batch Applications</li> <li>Business functions</li> <li>Business views</li> <li>Data structures</li> <li>Event rules</li> <li>Interactive applications</li> <li>Media Objects</li> <li>Data dictionary items</li> <li>UDC items</li> <li>Workflow items</li> <li>Menus</li> </ul>
Project Name	A OneWorld project is made up of a group of OneWorld objects that have been modified or created by a developer to complete a task. All work objects within OneWorld must be done within the context of a project.

#### **Explanation**

To Data Source

These fields are only valid for the following object actions. They will be blank for project logs. Transfer - For Object Librarian Objects, this is the source and target deployment data sources for moving object specifications. For Non-OL Objects, this is the source and target main data source for moving the data records. Check-in - The "To" field will indicate the check-in deployment data source. The "From" field will contain "LOCAL." Check-in applies only to Object Librarian Objects. Check-out - The "From" field will indicate the checkout deployment data source. The "To" fields will contain LOCAL". Checkout applies only to Object Librarian Objects. Delete - The "To" field indicates the data source where the object was deleted from. The "From" data source is irrelevant for delete. Add - The "From" and "To" fields will be identical. For Object Librarian Objects, this is the deployment data source of the path code where the object was created. For Non-OL objects, this is the data source where the object was created. Copy - The "From" and "To" fields will be identical. For Object Librarian Objects, this is the deployment data source of hte path code where the object was copied. For Non-OL objects, this is the data source where the object was copied. Save - The "From" location will always be "LOCAL." The "To" location will be the deployment data source of the save path code. Save applies only to Object Librarian Objects. Restore - The "To" location will always be "LOCAL." The "From" location will be the deployment data source of the save path code. Restore applies only to Object Librarian Objects. Get - For Object Librarian Objects, the "From" field will indicate the deployment data source fo the path code "From" location. For Non-OL Objects, the "From" field will indicate the data source of the "From" location. The "To" field will always contain "LOCAL."

#### **Explanation**

To Path Code or Environment

These fields are only valid for the following object actions. They will be blank for project logs. Transfer - For Object Librarian Objects, this is the source and target path codes for moving object specifications. This field is empty for non-OL objects. Check-in - The "To" field will indicate the check-in path code location. The "From" field will contain "LOCAL." Check-in applies only to Object Librarian Objects. Check-out - The "Form" field will indicate the checkout path code location. The "To" fields will contain LOCAL". Checkout applies only to Object Librarian Objects. Delete - For Object Librarian Objects, the "To" field indicates the path code where the specifications were deleted from. For Non-Object Librarian Objects, the "To" fields indicates the environment where the object was deleted from (if applicable - this is only populated for non-OL objects if the developer deleted the object from his local environment). For Object Librarian Objects, the "From" field indicates the path code where they were deleted locally (if applicable - delete of local specs only happen when the developer deletes an object). The "From" field is always empty for non-OL objects. Add -The "From" and "To" fields will be identical. For Object Librarian Objects, this is the path code where the object was created. For Non-OL objects, this is the environment where the object was created. Copy - The "From" and "To" fields will be identical. For Object Librarian Objects, this is the path code where the object was copied. For Non-OL objects, this is the environment where the object was copied. Save - The "From" location will always be "LOCAL." The "To" location will be the path code of the save location. Save applies only to Object Librarian Objects. Restore - The "To" location will always be "LOCAL." The "From" location will be the path code of the save location. Restore applies only to Object Librarian Objects. Get - For Object Librarian Objects, the "From" field will indicate the path code from location. For Non-OL Objects, the "From" fields will indicate the environment from location. The "To" field will always contain "LOCAL."

Field	Explanation
Program ID	The name of the OneWorld batch or interactive application (interactive or batch object). For example, the name of the Sales Order Processing interactive application is P4210, and the name of the Print Invoices batch process report is R42565.
	The name of the program ID is a variable length value.  This value is assigned according to a structured syntax in the form TSSXXX where:  The first alphabetic character of the program name identifies the type such as P for Program, R for Report, and so on. For example, the value 'P' in the name P4210 indicates that this is a program.  SS The second and third numeric characters of the program name identifies the system code. For example, the value '42' in the name P4210 indicates that this program belongs to System 42, which is the Sales Order Processing system.  XXX The remaining numeric characters of the program name identify a unique program or report. For example, the value '10' in the name P4210 indicates that this is the Order Entry application.
Date Updated	The date of the last update to the file record.
Time Updated	The time at which the program executed the last update to this record.
User ID	For World, the IBM-defined user profile.
	For OneWorld, the identification code for a user profile.

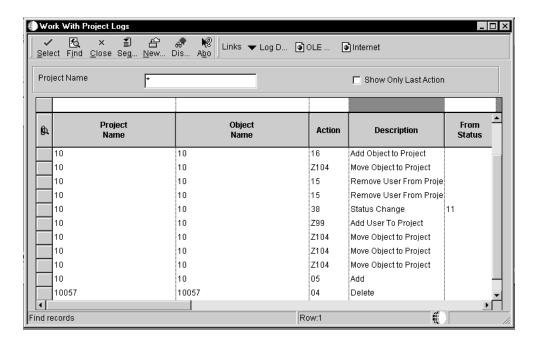
# **Locating Project Logs**

The Object Management Logging Application has a special form for quickly locating project logs. You can view all project logs you have permission to see, view selected project logs, or see only the last logging action for project logs.

# To locate project logs

- 1. In ActivEra Solution Explorer, type GH902 in the Fast Path field and press Enter.
- 2. Double-click the Object Management Logging button.
- 3. In the functions menu at the top, click Form, then Project Logs.
- 4. You can perform the following functions:
  - Click Find to show all OMW project logs.

OneWorld Xe (09/00) 5–67



• Enter data in the QBE cells to narrow your search, then click Find.

- Choose the Show Only Last Action option to show only the last logged action for the selected project.
- Click the Check for Attachments button to check for attachments.
- 5. Click Close.

Field	Explanation
Action	Defines the type of action the user can execute on the object type that was selected, when the project is at the status indicated. The following are the codes defining an Object action:  01 Transfer 02 Checkin 03 Checkout 04 Delete 05 Add 08 Save 09 Restore 10 Design 11 Get 12 Remove Object From Project 13 Update a Project 14 Add Object to Project 21 Switch Token 06 Copy 23 Force Release From Token Queue 30 Erase Checkout 38 Status Change
	The allowed Actions define the action that will be performed for the Transfer Activity Role. For example, you can setup the transfer rules to indicate whether it is valid to only transfer objects into a location or if it is valid to transfer into and delete objects from that location. This would mean, if the rule on a status change from 23 to 24 had the action Transfer and Delete, the objects the user has flagged to be deleted will be deleted from the defined "To" location and the other objects will be transferred from the "From" location to the "To" location. If the rule instead said on status change 23 to 24, objects would on be allowed to transfer the location and the deletion would not be performed.
From Status	This can be one of the project status codes, which are:  01 Complete 11 New Project Pending Review 21 Programming 25 Rework – Same Issue 26 QA Test/Review 28 QA Test/Review Complete 38 In Production 40 Production Development 41 Transfer Production to Prototype 42 Transfer Prototype to Development 45 Pristine Get 91 Cancelled Entered in Error

OneWorld Xe (09/00) 5–69

Field Explanation		
Object Name	This 200 character field contains an identifier for a OneWorld object. When used in conjunction with an Object Management Workbench Object Type (OMWOT), it can be used to uniquely identify any OneWorld object. Please see the H92/OT UDC for a list object types that can have their identifiers stored in this field.	
	Object Type - You may set up notifications to take placed based on Object Type. If an object of that type is on a project that the action indicated takes place for or is moved into the path code indicated, a message will be sent to the user. Object Type must always be used in conjunction with the Object Name.	
Object Type	In OneWorld, an object has traditionally been a reusable entity based on software specification created by the OneWorld Tools. These objects included Object Librarian Objects, such as interactive applications (APPL), as well as batch applications (UBE), and data structure (DSTR) objects. In OMW, we have expanded this definition to include other Non Object Librarian type objects or data source based rather than path code based objects. These include User Defined Controls (UDC), Workflow, ActivEra, Menus, and Data Items. OL Objects: <ul> <li>Batch Applications</li> <li>Business functions</li> <li>Business views</li> <li>Data structures</li> <li>Event rules</li> <li>Interactive applications</li> <li>Media Objects</li> <li>Tables Non-OL Objects</li> <li>Data dictionary items</li> <li>UDC items</li> <li>Workflow items</li> <li>Menus</li> </ul>	
Project Name	A OneWorld project is made up of a group of OneWorld objects that have been modified or created by a developer to complete a task. All work objects within OneWorld must be done within the context of a project.	
Project Name	A OneWorld project is made up of a group of OneWorld objects that have been modified or created by a developer to complete a task. All work objects within OneWorld must be done within the context of a project.	
To Status	Indicates an allowed next status for a project that is currently at the From status to be advanced to.	

Field	Explanation	
Program ID	The name of the OneWorld batch or interactive application (interactive or batch object). For example, the name of the Sales Order Processing interactive application is P4210, and the name of the Print Invoices batch process report is R42565.	
	The name of the program ID is a variable length value.  This value is assigned according to a structured syntax in the form TSSXXX where:  The first alphabetic character of the program name identifies the type such as P for Program, R for Report, and so on. For example, the value 'P' in the name P4210 indicates that this is a program.  SS The second and third numeric characters of the program name identifies the system code. For example, the value '42' in the name P4210 indicates that this program belongs to System 42, which is the Sales Order Processing system.  XXX The remaining numeric characters of the program name identify a unique program or report. For example, the value '10' in the name P4210 indicates that this is the Order Entry application.	
Date Updated	The date of the last update to the file record.	
Time Updated	The time at which the program executed the last update to this record.	
User ID	For World, the IBM-defined user profile.	
	For OneWorld, the identification code for a user profile.	

# **Viewing Detail Logs**

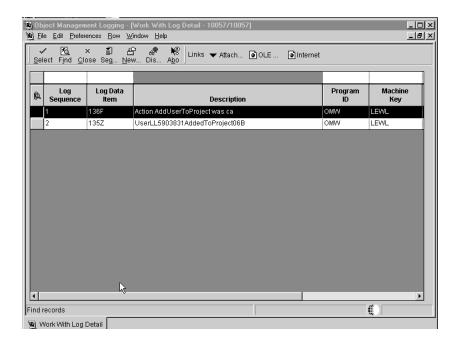
You can open the Work With Log Detail form to view log details for any log record currently appearing on your monitor. From the Work With Log Detail form, you can bring up the actual log entry in the View Full Log Text window.

# To view detail logs

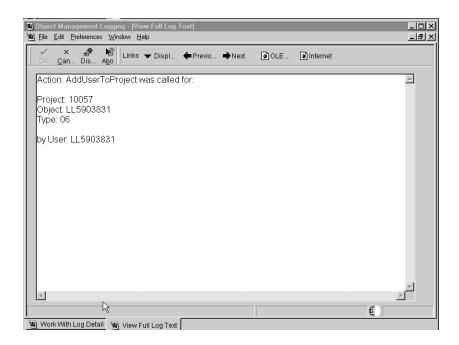
- 1. Double-click any log record you wish to research. Or, click the desired log record row to highlight it, then click the Select button.
- 2. Click Find.

The detail log record for the log selected appears.

All sequence details for the selected Log record appear in ascending numerical order.



To view the full text of the Description field, click it, then click Select.
 The View Full Log Text window appears, showing the actual log entry.



- 4. You can move between detail logs by clicking the Previous and Next buttons.
- 5. Click Close.

Field	Explanation	
Description	A user defined name or remark.	
Log Sequence	This is numeric sequence number to make the log detail for a particular action unique.	
Machine Key	For World, the Location indicates the machine (server or client).	
	For OneWorld, the Location or Machine Key indicates the name of the machine on the network (server or workstation).	
Log Data Item	This is a log detail data item. It defines the text of log detail under a major log action such as check-in, checkout, etc. All these data items are glossary data items and some of them have text substitution. For a complete of log items, please see the Logging System section of the Configuration Application (P98230).	
Program ID	The name of the OneWorld batch or interactive application (interactive or batch object). For example, the name of the Sales Order Processing interactive application is P4210, and the name of the Print Invoices batch process report is R42565.	
	The name of the program ID is a variable length value.  This value is assigned according to a structured syntax in the form TSSXXX where:  The first alphabetic character of the program name identifies the type such as P for Program, R for Report, and so on. For example, the value 'P' in the name P4210 indicates that this is a program.  SS The second and third numeric characters of the program name identifies the system code. For example, the value '42' in the name P4210 indicates that this program belongs to System 42, which is the Sales Order Processing system.  XXX The remaining numeric characters of the program name identify a unique program or report. For example, the value '10' in the name P4210 indicates that this is the Order Entry application.	
Date Updated	The date of the last update to the file record.	
Time Updated	The time at which the program executed the last update to this record.	
User ID	For World, the IBM-defined user profile.	
	For OneWorld, the identification code for a user profile.	

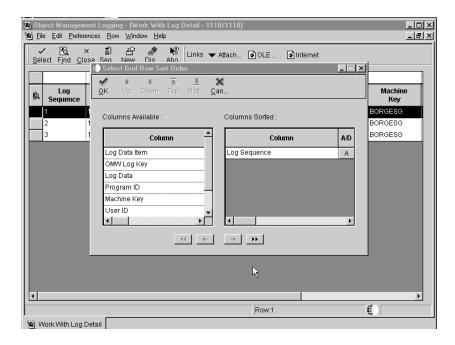
OneWorld Xe (09/00) 5–73

# **Reordering Log Detail Record Fields**

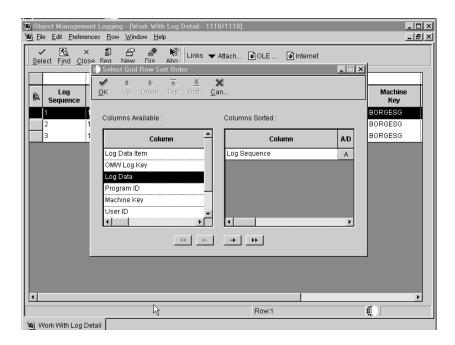
You can use the Select Grid Row Sort Order form to reorder the object or project log detail fields within a record. This information can then be printed out in the sort order you specified.

### To reorder log record fields

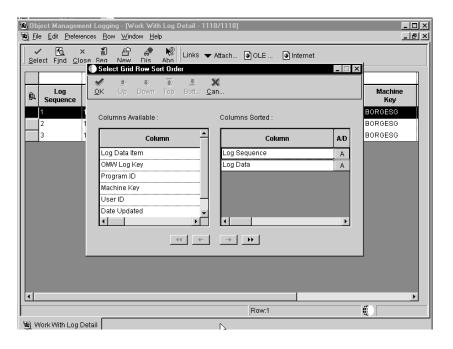
- 1. View log detail records as described in Viewing Detail Logs in this chapter.
- 2. Click Sequence.



3. Click the first column you want to sort in the Columns Available window.



4. Click the right-pointing arrow to move it to the Columns Sorted window on the right.



5. Repeat steps 3 and 4 as required until all the columns you wish to view are in the correct sort order.

If you make an error, you can move columns back to the Columns Available window for resorting. Select the column to be resorted and the left-pointing arrow.

6. Click OK in the Select Grid Row Sort Order form to reorder the log columns.

# **Printing Logs**

Printing logs captures the development history and current status of projects or objects. Use this procedure in conjunction with the Reordering Log Detail Record Fields procedure to produce customized project and object development reports.

### To print logs

- 1. Click File then Print Screen.
- 2. Modify print settings as required.
- 3. Click OK in the Print form.

# **Configuration Worksheets**

You can use the following worksheets to simplify configuring User Roles,
Allowed Actions, Project Status Activity Rules and Object Transition Activity Rule
in OMW. These areas are configured in the following order:
Assigning users to user roles within a project
☐ Applying allowed actions to user roles
☐ Setting up project status activity rules
☐ Setting up object transfer activity rules
<u> </u>

# Assigning Users to User Roles Within a Project

Clicking the User Roles button allows you to assign users to user roles. You can enter custom user roles in the left hand column of the User Roles table. Or, you can use OMW's default user roles, which are listed in the right hand column of the User Roles table.

Custom User Roles	Default User Roles
	01 = Originator
	02 = Developer
	03 = Manager
	04 = Quality Assurance
	05 = Administrator
	06 = PVC Technician

# **Applying Allowed Actions to User Roles**

Clicking the Allowed Actions button lets you set up one or more allowed actions, object types, and project statuses for each user role. Refer to the User Roles table to enter custom or default user roles. You can use the Project Statuses table to create project statuses, or enter the default project statuses listed in the right hand column of the table. See the Default Allowed Actions and Default Object Types table for a list of default allowed actions to specify during setup.

The following table contains a list of project statuses. You can enter your own project statuses in the first column.

Custom Project Statuses	Default Project Statuses
	01 – Complete
	11 – New Project Pending Review
	21 – Programming
	25 – Rework–Same Issue
	26 – QA Test/Review
	28 – QA Test/Review Complete
	38 – In Production
	40 – Production Development
	41 – Transfer Production to Prototype
	42 – Transfer Prototype to Development
	45 – Pristine Get
	91 – Cancelled Entered in Error

The default allowed actions listed in the table below cannot be changed. The information is provided for reference only.

Value	Description
02	Check-In
03	Check-Out
04	Delete

Value	Description
05	Add
06	Сору
08	Save
09	Restore
10	Design
11	Get
12	Remove object from project
13	Update a project
16	Add object to a project
21	Switch token
23	Force release from token queue
30	Erase check-out

The default object types listed in the table below is provided for reference only.

Value	Description	
01	Object Librarian objects	
02	Data items	
03	Versions	
04	UDCs	
05	Menus	
06	Documentation record (SAR object)	

OneWorld Xe (09/00) 5–79

Value	Description	
11	Transfer record (SAR object)	
12	History record (SAR object)	

# **Setting Up Project Status Activity Rules**

Clicking the Activity Rules button and selecting From projects opens Project Status Activity Rules. As a project advances, it progresses from a From project status to a To project status. For each From project status there can be one or more To project statuses. (However, each From and To project status combination must be listed separately during setup).

You can map all possible From and To project status transitions in the Project Status Transitions table for use during setup. The Project Status table lists the default project status codes. Typical project status transitions are shown below:

- Normal project status transition path:  $11 \rightarrow 21 \rightarrow 26 \rightarrow 28 \rightarrow 38 \rightarrow 01$
- Normal project status transition path with rework option: 11 -> 21 -> 26 -> 25 -> 21 -> 26 -> 28 -> 38 -> 01

The following table gives you a place to record project status transitions and map all possible project status paths:

From Project Status	To Project Status

From Project Status	To Project Status

# **Setting Up Object Transfer Activity Rules**

For each From and To Project Status transition, you can set up the following fields:

#### Active

This field shows whether this rule is currently active or not. 0 means the rule is inactive and 1 means the rule is active.

#### User

This field is set up by user ID, System Role, or \*PUBLIC.

#### • Object Type

This field shows the object type affected.

### • From and To (Transfer) Locations

These fields list the From and To (Transfer) Locations specified for the corresponding From and To project statuses.

#### • From and To (Project Software) Releases

These fields list the From and To Releases for the corresponding From and To project statuses.

#### Allowed (User) Action

This field lists the actions that will be performed for this transfer activity rule.

#### Release Token

This field lists whether the object type's token gets released during the specified project status transition. 0 means the token is inactive and 1 means the token is active.

Complete the following two tables for reference during setup. Use the first table to record project statuses, objects types, and allowed actions. See *Setting Up* 

*Project Status Activity Rules* in this section for more information about the data for this table.

Active	User	From Project Status	To Project Status	From SAR Status	To SAR Status

Use the following table to record object types, save locations, token release numbers and project release numbers. See *Setting Up Object Transfer Activity Rules* in this section for more information about the data in this table.

Active	User	Object Type	From Location	To Location	Release Token	Action

Active	User	Object Type	From Location	To Location	Release Token	Action

OneWorld Xe (09/00) 5–83

# **Project Promotion Life Cycle**

## **Project Promotion Life Cycle**

The diagram displayed in this chapter shows where objects are transferred with the in the J.D. Edwards project promotion life cycle.

The normal promotion cycle is as follows:

#### where

- 11=Newproject pending review
- 21=Programming
- 26=QA test/review
- 28=QA test/review complete
- 38=In production
- 01=Complete

During the normal project promotion cycle, developers check object out of and into the Development path code, and then promote them to the prototype path code, and then to the Production path code before declaring them "complete."

Administrators can follow a different promotion cycle:

where

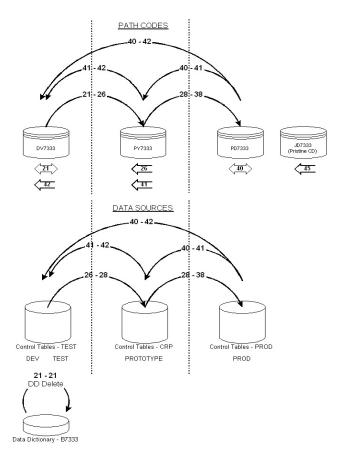
- 11=Newproject pending review
- 40=Production development
- 41=Transfer from Production to Prototype
- 42=Transfer from Prototype to Development
- 01=Complete

During this promotion cycle, administrators check objects out of and into the Production path code in order to apply fixes, and then promote the objects "backwards," to the Prototype path code and the Development path code.

Because this promotion cycle should not be used by developers, J.D. Edwards recommends that you apply the status activity rules allowing the promotion cycle to a specific group of User ID for administrators.

For more information on status activity rules, see *Setting Up Project Status Activity Rules* in this section.

# **Project Promotion Life Cycle**



# **Printing OneWorld Reports**

The Printers application (P98616) provides a single point of entry for configuring your printers within OneWorld. The application allows you to define printers for workstations and enterprise servers. These definitions reside in OneWorld tables that are maintained by the Printers application (P98616).

In addition to creating your own reports, OneWorld includes a number of predefined reports and report versions, which you can use and modify for your business needs. OneWorld uses the batch engine to create reports and generates these reports in Portable Document format (PDF). You can view the PDF files using the Adobe Acrobat Reader software.

Reports process as batch applications without user interaction. When a user submits a report for processing, the user makes choices, such as the selection and sequencing of data to include in the report, the location where the report will process, logging capabilities to monitor how the report processes, and the printer on which the report prints.

See the OneWorld Foundation Guide for more information about submitting and printing a report.

Understanding OneWorld printing
Working with the Printers application
Generating and retrieving logs for your report
Setting up a OneWorld printer to use a barcode font
Designing reports to run on OneWorld line printers

This section describes the following:

# **Understanding OneWorld Printing**

When you submit a OneWorld report, the batch engine generates a portable document format (PDF) file. The batch engine uses a device context to create the PDF file. This device context consists of information such as page size and the printable area of a page. OneWorld generates this information from the printer tables for all platforms.

OneWorld gives you the option of viewing the report (the PDF file) on your workstation, using Adobe Acrobat Reader, or sending the report directly to a printer. You can also print the report from the Adobe Acrobat Reader. When you send the report to a printer, OneWorld uses a conversion filter to transform the PDF file into one of three Page Description Language (PDL) formats: PCL, PostScript, or line-printer text, depending on the type of printer that prints the report.

The OneWorld batch engine uses the following logical path to determine to which printer to send a report. If the first method does not return a valid printer name, the batch engine uses the subsequent method.

When the user submits the report:

- 1. The batch process triggers the Do Initialize Printer event from Report Design Aid (RDA). If this process retrieves a valid printer name, the following processes are ignored.
- 2. The user overrides the default printer name at the time that the report is submitted. If the user overrides the default printer with a valid printer name, the following processes are ignored.
- 3. The RDA specifications pass a printer name to the batch process. If this process retrieves a valid printer name, the following process is ignored.
- 4. OneWorld determines from the Printer Definition table (F98616) a valid default printer based upon the current user, the environment that the user is signed onto, and the host that processes the report.

Running reports on the server
Running reports on the workstation

This chapter contains the following:

☐ Print-time characteristics

☐ Print settings for the workstation jde.ini

## **Running Reports on the Server**

When you submit a report to the server, the engine prompts you for a printer name previously defined in the Printers application. Then the server automatically creates a PDF file using the settings associated with the selected printer, unless event rules (ER) override those printer settings. You can, however, affect how your report prints on the server before you generate a PDF file by changing settings, such as the printer, page orientation, PDL, and paper type, on the Printer Selection dialog box. When you view the report on the server, OneWorld copies the PDF file from the server to the local \b7\PrintQueue directory on your workstation.

When you run a report, you also have the option of turning on logging capabilities. You do so from the Advanced form when you submit your report. When you view a log, your workstation stores the log file in the \b7\PrintQueue directory.

#### See Also

• Generating and Retrieving Logs for Your Report for more information about the location of the PrintQueue directory on a server.

# **Running Reports on the Workstation**

When you choose to run a report and view the output on the screen, the engine tries to connect to the printer defined in Report Design. If the engine cannot connect or if there is no printer defined, the engine uses the default printer from the printer tables. Using the settings that it retrieves, the engine creates a PDF file and displays the report through Acrobat Reader. The PDF file is stored in your local \b7\PrintQueue directory.

When you run a report locally and send the output to a printer, the engine displays the Printer Selection dialog box, which gives you the option to change the printer, page orientation, PDL, paper type, and so on. The initial printer shown in this dialog box is the one defined in RDA or the default OneWorld printer, if none was defined. The engine connects to the printer defined in the printer dialog box and retrieves the associated settings. Using these settings, the engine creates a PDF file, converts the PDF into a PDL file using the OneWorld conversion filter, and sends the PDL file to a printer.

### **Print-Time Characteristics**

The user has the option of overriding the printer at a report's print time. This option is different from the option for overriding the printer when the user first submits the report. At submit time, the user can choose any valid enterprise printer. At print time, however, the user can override the printer only with another printer that supports the same platform, PDL, and paper type as the original printer. This is because the batch engine has already created the PDF version of the report and has imbedded into the PDF file the platform, PDL, and paper type information.

# Print Settings for the Workstation jde.ini

The workstation jde.ini settings control whether a report prints immediately and whether OneWorld saves the output after processing the report.

[NETWORK QUEUE SETTINGS] PrintImmediate=TRUE/FALSE SaveOutput=TRUE/FALSE

Setting	Description
PrintImmediate	Specifies whether the system automatically prints the report after processing is complete. Valid values are:
	TRUE. The system processes the report on the server, generates a PDF file, converts the PDF to the appropriate PDL for the defined printer, and then prints the report.  FALSE. The system processes the report on the server, but does not automatically print the report. Users must use the Work with Servers application to manually print the report.
SaveOutput	Specifies whether the system saves or deletes the output after you view or print the job. Valid values are:
	TRUE. The system saves the output after you have viewed or printed the job.  FALSE. The system deletes the output after you have viewed or printed the job.

# Working with the Printers Application

OneWorld provides a single application that uses a director interface to help you set up your printer. From this director, you can add new printers, modify existing printers, and define default printers for a combination of a user, a host, and an environment. You can also add and modify the paper types and custom conversion programs that your printers use at the time that you add and modify printer settings.

#### See Also

• *Understanding OneWorld Printing* for information about how OneWorld determines which printer to print to when a user submits a report.

**Note:** You must set up printers for each server platform that you use in your enterprise.

This chapter contains the following tasks:

- Adding a new printer
- Defining a default printer
- Modifying an existing printer
- Copying an existing printer
- Deleting a printer
- Deleting a paper type
- Searching for incorrect printer records
- Determining logical printers attached to batch processes

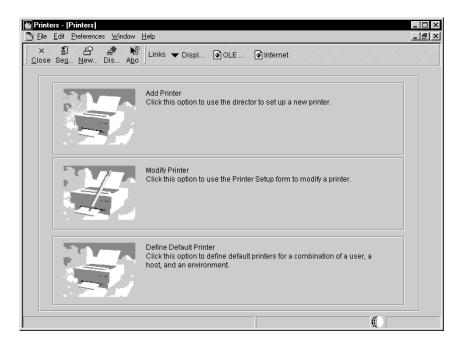
# To add a new printer

When you add a printer, OneWorld provides a director to help you with each step of the process. Instructions appear on each form of the director to guide you through the printer addition process. The following procedure should be used in conjunction with the steps that appear on the Printer Setup director.

First-time users who are installing their first printer must complete this task and then the task "Define a default printer" in this chapter.

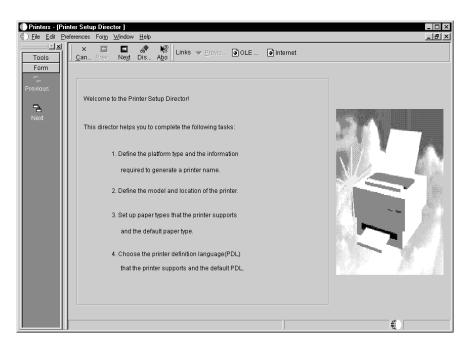
**Note:** You must complete all of the fields that appear on the director forms.

1. On the Printers menu (GH9013), choose Printers (P98616).

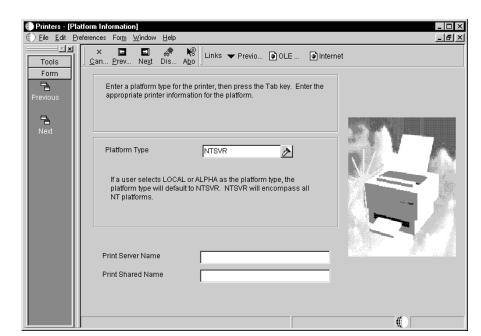


2. On the Printers form, click Add Printer.

The welcome page for the Printer Setup director appears. This page describes the tasks that the director helps you to perform.



3. Review the welcome page and click the Next button.



The Platform Type defaults in automatically depending on which operating system your OneWorld is running on.

#### 4. Complete the following fields and click Next:

#### • Print Server Name

Type the name of the print server for the printer that you are setting up. You cannot use spaces or special characters in this field. OneWorld uses this name, along with the print shared name, to create the printer name, which appears grayed-out on the subsequent form.

#### • **AS/400:** *library name/outqueue name*

For the AS/400, the physical printer name must be the same as the outqueue name. If you use the default QGPL library to store your outqueues, you need only enter the outqueue name in this field. This information must be entered in upper case.

Example: DEVDES3A

If your outqueues reside in a library other than the default QGPL library, you need to enter the library name and the outqueue name in this field.

Example: QUSERSYS/DEVDES3A

**Note:** When you qualify your outqueue name with the library name, you avoid possible name conflicts that might result in the submission of your report at an unexpected outqueue.

OneWorld Xe (09/00) 6–9

• **Windows NT:** \\server name\\printer name

Example: \\corprts1\\docprf2

This information must be entered in lower case.

• **UNIX:** *printer name* (no slashes)

Example: devprn16

This information must be entered in lower case.

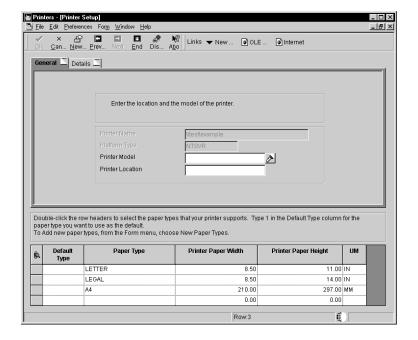
For printing reports to a non-network printer, leave this field blank.

#### Print Shared Name

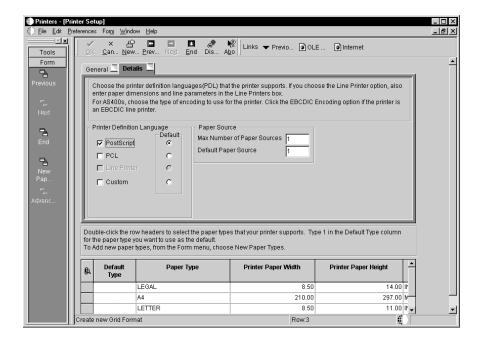
Type the share name of the printer that you are setting up. You cannot use spaces or special characters in this field. OneWorld uses this name, along with the print server name, to create the printer name, which appears grayed-out on the subsequent form.

When you click Next, the Printer Setup form appears. Use this form to specify information for the printer such as the printer model, physical location of the printer, printer definition language, paper types, and encoding selection (AS/400 only).

**Note:** When you change an existing printer, this is the page where you make your modifications. See the task *To modify an existing printer*.



- 5. On the General tab, complete the following fields, and then click the Details tab:
  - Printer Model
  - Printer Location



- 6. On the Details tab, inside the box labeled Printer Definition Language, choose any the following options:
  - PostScript
  - PCL
  - Line Printer

**Note:** If you choose PostScript or PCL from the left side of the box, OneWorld disables the Line Printer option. If you choose the Line Printer option from the left side of the box, OneWorld disables the PostScript and PCL options. You can choose multiple printer definition languages (PDLs) from the left side of the box, but only one default PDL under the Default label on the right side of the box. This sets the PDL that you want to specify as your default. You can override this PDL when a batch process is submitted.

When you choose the Line Printer option, the following happens:

OneWorld disables the detail area at the bottom of the form.
 Any paper types that you chose are cleared. OneWorld automatically provides a printer type of \*JDE LINE PAPER for the printer.

OneWorld Xe (09/00) 6–11

- Fields appear within a box labeled "Line Printers." You use these fields to set the paper dimensions and line parameters. This is fully explained in the following steps.
- When you choose the Line Printer option along with the AS/400 platform type, fields appear within a box labeled "AS400 Only." You use these fields to set the AS/400 encoding that your printer supports. This is fully explained in the following steps.
- Custom

**Caution:** The custom option uses an advanced feature of the Printers application. Only users with knowledge about building parameter strings for printers should use this option. This is fully explained in the following steps.

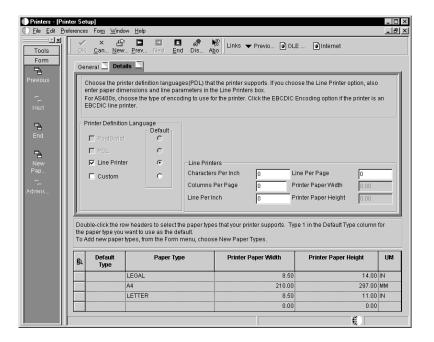
- 7. On the Details tab, when you choose the PostScript option, the Paper Source box appears, from which you can change the following options:
  - Max Number of Paper Sources

Enter a numeric value in this field to indicate the number of paper trays that this printer has available.

Default Paper Source

Enter a numeric value in this field to indicate the default tray number from which you want OneWorld to draw paper.

8. When you choose the Line Printer option, fields appear within a box labeled "Line Printers." You use these fields to set the paper dimensions and line parameters. Complete the following fields:



#### Characters Per Inch

The value that you enter in this field determines the number of characters that the physical printer allows in one horizontal inch.

#### Columns Per Page

The value that you enter in this field determines the number of characters that appear in one line of text in the given report.

#### • Lines Per Inch

The value that you enter in this field determines the number of lines of text that the physical printer allows in one vertical inch.

#### • Lines Per Page

The value that you enter in this field determines the number of lines of text that the physical printer allows on one printed page.

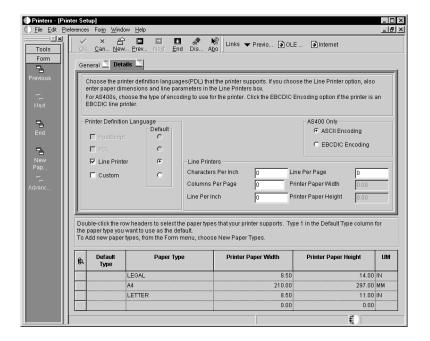
#### Printer Paper Width

The value in this field is calculated automatically, based on the numbers you enter in the Line Printers box.

### • Printer Paper Height

The value in this field is calculated automatically based on the numbers you enter in the Line Printers box.

9. When you choose the Line Printer option along with an AS/400 server, fields appear within a box labeled "AS400 Only." You use these fields to set the AS/400 encoding that your printer supports. Choose one of the following:



- ASCII Encoding
- EBCDIC Encoding

**Note:** If you choose a PostScript or PCL printer along with an AS/400 server, the ASCII Encoding option is automatically checked and the "AS400 Only" box is disabled.

10. To use the Custom option, complete the following:

**Note:** The custom option uses an advanced feature of the Printers application. Only users with knowledge about building parameter strings for printers should use this option.

• Click the Custom checkbox.

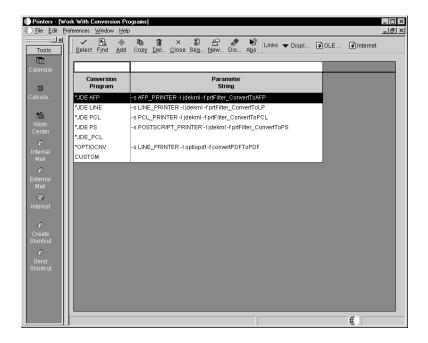
A field appears beneath the Custom button.

• Enter the name of the conversion filter that you want to use.

You can either type a conversion filter name into the field below the custom option, or you can use the visual assist to select a filter.

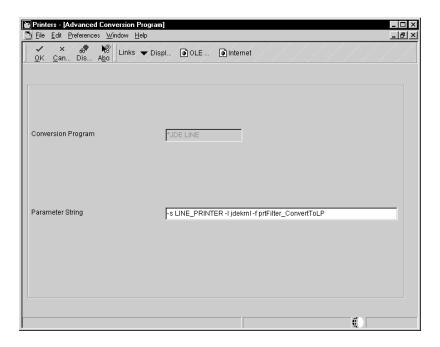
 To change or add a conversion filter, choose Advanced from the form menu. This option is enabled only when Custom has been chosen.

The Work With Conversion Programs form appears.



• Either click Add, or choose one of the filters and click either Copy or Select.

The Advanced Conversion Program form appears.



- Change the following fields, and then click OK:
  - Conversion Program

If you clicked Add or Copy on the previous form, the Conversion Program field is enabled. Enter the name of the

OneWorld Xe (09/00) 6–15

conversion program that you want to add or copy. If you are making a copy, the string that you highlighted on the previous form appears in the Parameter String field.

#### Parameter String

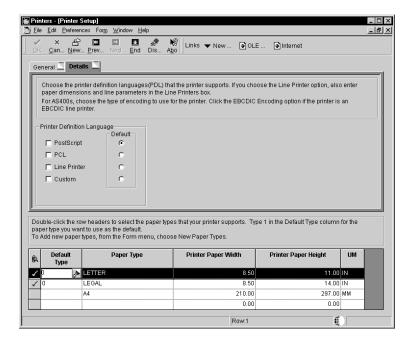
The parameter string is entered automatically. It is based on the host from which you are printing (AS/400, HP9000, etc.) and the type of printer (postscript, PCL, or line). For example:

```
-s string_name -l library_name -f convertPDFToPS
```

where -s defines the string name, -l defines the library name (this value is the letter "l," not the number "1"), and -f defines the function name

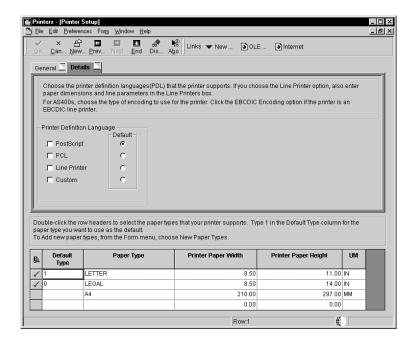
11. In the detail area at the bottom of the Printer Setup form, double-click the row header for each paper type that your printer supports. A checkmark appears in the row header for each paper type that you choose.

**Note:** You can add new paper types as necessary. Instructions to do so are included later in this task.



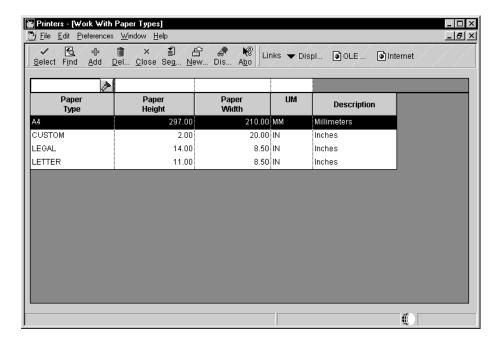
12. In the Default Type column, type the numeral "1" in the row for the paper type that you want to use as the default. You can choose only one default

paper type. You can override the default paper type when a batch process is submitted.

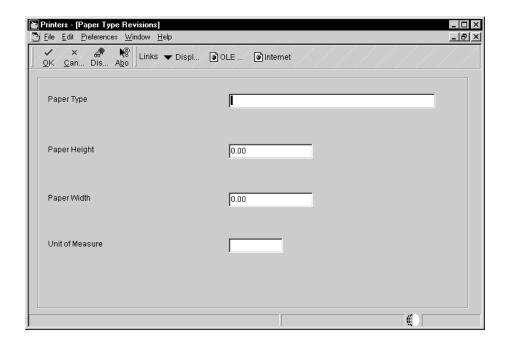


- 13. To add a new paper type, do the following:
  - From the Form menu, choose New Paper Type.

The Work With Paper Types form appears.



• Click Add.



The Paper Type Revisions form appears.

- Complete the following fields, and click OK:
  - Paper Type
  - Paper Height
  - Paper Width
  - Unit of Measure

OneWorld saves the new paper type and displays the Work With Paper Types form. After you close Work with Paper Types, the new paper type will be available in the Printer Setup detail area form. All previous paper type selections are cleared and would need to be chosen again if you want to reuse them.

14. When you finish entering information for the printer, click End.

OneWorld saves the new printer and displays the Printer form.

Field	Explanation
Platform Type	The type of physical hardware the database resides on.
AS400 Library Name	AS400 Library Name for setting up the printer
AS400 Outputqueue Name	AS400 Outputqueue Name for setting up the printer
Server Name	Refers to the computer that receives documents from clients.

Field	Explanation	
Printer Name	A name that refers to a shared resource on a server. Each shared directory on a server has a share name, used by PC users to refer to the directory.	
Printer Model	Printer capabilities are as follows: Printer Model: the model of the printer Printer Location: where the printer physically resides Encoding: AS/400 users' only feature	
Paper Type	A user defined code (H98/PT) that indicates the type of printer paper, such as letter or legal. For example, LETTER, LEGAL, and A4.	
Paper Width	A value that specifies the width of the paper for this paper type. This value is in the unit of measure specified by Unit of Measure.	
Paper Height	A value that specifies the height of the paper for this paper type. This value is in the unit of measure specified by Unit of Measure.	
Unit of Measure	A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).	
	Form-specific information	
	Indicates the unit of measure in which the paper height and width are entered.	
	Example:  IN = Inches  MM = Millimeters	
EBCDIC Encoding	Printer capabilities are as follows:  Printer Model: the model of the printer Printer Location: where the printer physically resides Encoding: AS/400 users' only feature	
Columns Per Page	A line printer parameter that specifies the number of columns per page. For example, 80 or 132.	
Characters Per Inch	The horizontal printing density. Enter the number of characters per inch supported by your printer.	
Line Per Page	A line printer parameter that specifies the number of lines per page. For example, 60 or 66.	

OneWorld Xe (09/00) 6–19

Field	Explanation
Line Per Inch	The line spacing should be entered as the number of lines per inch and must be supported by your printer. The valid values are:  4 - IBM 5219, 5224, 5225, and 3287 printers only 6 - IBM 5224 printer only 8 - IBM 5224 printer only 9 - IBM 5225 printer only
	The standard computer print is 6 LPI and 10 CPI. If you are printing on 8 $1/2$ " x 11" paper, you would specify 8 LPI and 15 CPI.
The maximum number of output tray	The maximum number of paper trays available on the printer you are setting up.
The output tray name	The output tray that a user wants to use for a given batch print job.

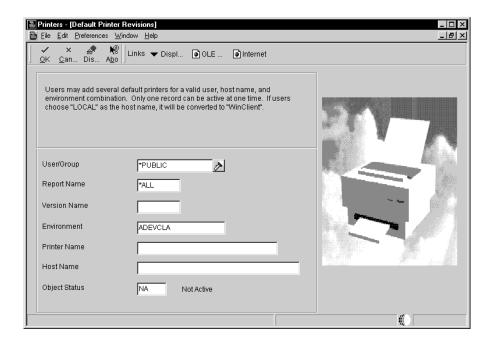
## To define a default printer

- 1. On the Printers menu (GH9013), choose Printers (P98616).
- 2. On the Printers form, click Define Default Printer.

The Work With Default Printers form appears.

3. Click Add.

The Default Printer Revisions form appears.



#### 4. Complete the following fields, then click OK.

#### User/Group

Click the visual assist to choose either a particular user for this printer or to choose an entire group. If the field is left blank, the default value is \*PUBLIC.

#### Report Name

Click the visual assist to choose a specific report to print. If the field is left blank, the default value is \*ALL.

#### Version Name

Click the visual assist to choose a specific version to run. If the field is left blank, the default value is \*ALL. If the Report Name is \*ALL, the version name will default to \*ALL and be disabled.

#### • Environment

OneWorld automatically enters the name of the environment that you are currently signed onto. You can change this information.

#### Printer Name

#### Host Name

Include the host server to where reports will run. The visual assist displays the appropriate host names, based on the printer name you select.

#### Object Status

You can make this new printer the default printer by changing its status to active. If an error occurs, it means that another printer is currently the active default. You need to change the original default printer to inactive before you can activate the new printer. You can perform multiple status changes from the Work With Default Printers form as explained at the end of this task.

After you click OK from the Default Printers Revision form, the Work With Default Printers form appears.

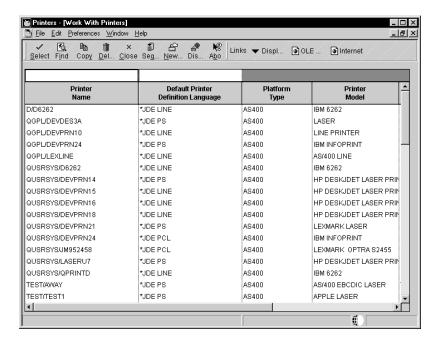
5. To change the status of a default printer from the Work With Default Printers form, choose a default record, and then from the Row menu, choose Change Status.

If another printer is already apecified as the active default, an error occurs. To change the original default printer to inactive, choose it, and from the Row menu, choose Change Status. Then make the new printer the default.

### To modify an existing printer

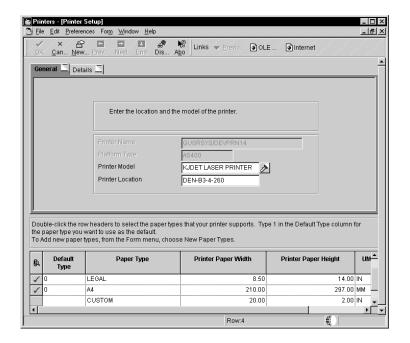
- 1. On the Printers menu (GH9013), choose Printers (P98616).
- 2. On the Printers form, choose the Modify Printer option.

The Work With Printers form appears. This form lists all available printers.



3. Choose the printer that you want to modify and then click Select.

The Printer Setup form appears. Use this form to change information for the printer, such as the printer model, physical location of the printer, printer definition language (PDL), and paper types.



4. Modify the information for your printer as necessary and then click OK. You cannot modify the printer name and platform type. If you chose a line printer, the paper-type grid at the bottom of the form is disabled.

OneWorld saves the new printer information and returns you to the Work With Printers form.

# To copy an existing printer

- 1. On the Printers menu (GH9013), choose Printers (P98616).
- 2. On the Printers form, choose the Modify Printer option.

The Work With Printers form appears. This form lists all available printers.

3. Choose the printer that you want to copy, and then click Copy.

The Printer Setup form appears.

- 4. Complete the following fields:
  - Printer Name

Enter the entire printer name, including the server path. For example, if printer docprf2 is on server corprts1, the printer name for a Windows NT printer would be: \\corprts1\docprf2. If you use multiple platforms, you must define a printer for each platform, using the following naming conventions:

OneWorld Xe (09/00) 6–23

#### • **AS/400:** *library name/outqueue name*

For the AS/400, the printer name must be the same as the outqueue name. If you use the default QGPL library to store your outqueues, you need only enter the outqueue name in this field. The information that you enter must be in upper case.

Example: DEVDES3A

If your outqueues reside in a library other than the default QGPL library, you need to enter the library name and the outqueue name in this field.

Example: QUSERSYS/DEVDES3A

**Note:** When you qualify your outqueue name with the library name, you avoid possible naming conflicts that might result in the submission of your report to an unexpected outqueue.

• **Windows NT:** \\print server name \printer name

Example: \\corprts1\\docprf2

The information that you enter must be in lower case.

• **UNIX:** *printer name* (no slashes)

Example: devprn16

The information that you enter must be in lower case.

Platform Type

Enter the platform that you are printing from, such as an AS/400 server.

- 5. On the Details tab, change any information as needed.
- 6. Click OK.

# To delete a printer

- 1. On the Printers menu (GH9013), choose Printers (P98616).
- 2. On the Printers form, choose the Modify Printer option.

The Work With Printers form appears. This form lists all available printers.

3. Choose a printer or choose multiple printers by holding down the Ctrl key, and then click Delete.

This removes the printer definition from OneWorld.

## To delete a paper type

- 1. On the Printers menu (GH9013), choose Printers (P98616).
- 2. On the Printers form, choose the Modify Printer option.

The Work With Printers form appears. This form lists all available printers.

3. Delete a printer, then click Select.

The Printer Setup form appears.

4. On the Printer Setup form, from the Form menu, choose New Paper Type.

The Work With Paper Types form appears.

- 5. Choose a paper type and click Delete.
- 6. On Confirm Delete, click OK.

The paper type that you deleted no longer appears in the detail area.

# To search for incorrect printer records

Use the following batch process to search the Printer Capability table (F986163) and list printer records that are incomplete, or that contain incorrect printer information. This task might be useful to users who are upgrading OneWorld from a release prior to B73.3.1 to release B73.3.2 or later. This report lists information that can help you correct your printing records.

- 1. From the System Administration Tools (GH9011) menu, choose Batch Versions.
- 2. On the Work With Batch Versions Available Versions form, in the Batch Application field, type R9861602, and click Find.

The XJDE0001 version appears.

3. Run the version as explained in the *Submitting a Report* section of the *Enterprise Report Writing Guide*.

The report lists reports that have a logical printer name. Use this information to change existing printer settings, since logical and physical printer names are no longer used in OneWorld.

4. Go to the task *To modify an existing printer*, and using the report, find the printer record and correct it.

## To determine logical printers attached to batch processes

Use the following batch process to determine which of your batch processes, if any, are attached to printers. This task might be useful to users who are upgrading OneWorld from a release prior to B73.3.1 to release B73.3.2 or later.

- 1. From the System Administration Tools (GH9011) menu, choose Batch Versions.
- 2. On the Work With Batch Versions Available Versions form, in the Batch Application field, type R9861601, and click Find.

The XJDE0001 version appears.

- 3. Run the version as explained in the *Submitting a Report* section of the *Enterprise Report Writing Guide*.
  - The report lists reports that have a logical printer name. Use this information to change existing printer settings, since logical and physical printer names are no longer used in OneWorld.
- 4. Use Report Design Aid (RDA) to attach a valid printer to those batch processes that had been attached to a logical printer. Only someone familiar with RDA should attempt to attach a printer.

# Generating and Retrieving Logs for Your Report

When you run a OneWorld report, you can specify whether you want to create logs for the report. The logs that you can create are the jde.log and the jdedebug.log. These logs allow you to review how your reports process on the server. These logs reside in a specific directory on the server. Your jde.ini settings determine the location of this directory. Also, depending on the platform that you use, the jde.ini setting differs slightly. The following list provides sample jde.ini settings for the directory where your report logs reside:

AS/400

[INSTALL]
DefaultSystem=B733SYS

Example path: B733SYS\PRINTQUEUE

UNIX

[INSTALL]
B733=/usr/jdedwardsoneworld/output

Example path: /usr/jdedwardsoneworld/output/PrintQueue

Windows NT Server

[INSTALL]
B733=d:\jdedwardsoneworld\output

Example path: d:\jdedwardsoneworld\output\PrintQueue

The default directory for your log files is PrintQueue, which becomes a subdirectory to the directory that you designate in the jde.ini file. You can change the location of this directory as necessary.

**Note:** These jde.ini settings also determine the location where your report output resides after processing. If you set your jde.ini to save the output for your reports, OneWorld saves a PDF file for the report in the report output directory.

OneWorld Xe (09/00) 6–27

#### To create logs for your report

1. On System Administration Tools (GH9011), choose Batch Versions (P98305).

The Work with Batch Versions form appears. On this form you can locate and run reports. Also, you can modify version detail information, data selection, and data sequencing.

- 2. Type an application ID in the Batch Application field and click Find. For example, to locate a version for the One Line Per Address report, type R014021.
- 3. Choose a version to submit, and then click Select.

The Version Prompting form appears. On this form, you can choose to change the data selection, change the data sequencing, and access the Advanced Operations form.

4. Choose Advanced from the Form menu.

The Advanced Operations form appears. On this form, you can override the location where your report processes, activate the jde.log, activate the jdedebug.log, and modify the level of information that your logs include.

- 5. Modify the following information, then click OK:
  - Logging (JDE.log)

Turn on this option to activate a basic log that helps you determine when a fault occurs during a batch process.

Tracing (JDEDEBUG.log)

Turn on this option to turn on advanced UBE logging that includes details about the batch process.

UBE Logging Level

The value that you enter here, from 0-6, determines the level to which your batch process log shows errors ranging from error messages to object level messages and UBE function messages.

**Note:** When you choose a high value to receive more technical information, you also receive all the information for the lower values. For example, when you enter a value of 6 (UBE function messages), you also receive information for values 0-5.

6. On the Version Prompting form, click Submit to run your report and create your logs.

Field	Explanation	
JDE Logging	When the batch job is run on a server, this field allows you to indicate if JDE logging should be enabled for the execution. If the server is already set to perform JDE logging, it occurs regardless of how this field is set.	
Tracing	When the batch job runs on a server, this field indicates whether tracing is enabled for execution of the job. If the server is already set to perform tracing, it occurs regardless of how this field is set.	
UBE Logging Level	Indicates the type of error logging that occurs when the batch job runs. The following list describes the different levels:  0 Error Messages 1 Informative Messages and Log Entry 2 Section Level Messages 3 Object Level Messages 4 Event Rule Messages 5 Database Mapping Messages 6 UBE Internal Function Calls, Textout Values	

# Setting Up a OneWorld Printer to Use a Barcode Font

OneWorld supports the use of the BC C39 3 to 1 Medium barcode font. J.D. Edwards includes this barcode font with OneWorld. After you set up your OneWorld printers, you can assign a printer to use a barcode font for your reports. This section describes how to set a printer in OneWorld to support the barcode font BC C39.

**Note:** OneWorld printers that support barcodes must use either the PostScript or PCL printer definition languages.

Complete the following tasks:

- Set up a OneWorld printer to use a barcode font
- Modify OneWorld barcode printer information
- Copy OneWorld barcode printer information for a new printer
- Delete barcode support information from a OneWorld printer

## To set up a OneWorld printer to use a barcode font

- 1. On the Printers menu (GH9013), choose Bar Code Support (P986166).
- 2. On the Work with Bar Code Font form, click Add.

The Bar Code Font Revisions form appears. USe this form to determine which printer uses the bar code font.

- 3. Complete the following fields and options:
  - Printer Name

Click the visual assist for this field to access a list of OneWorld printers.

PostScript or PCL

Choose the appropriate option, depending on the printer definition language of the printer in the Printer Name field.

True Type Font

Click this button to select the true type barcode font BC C39 3 to 1 Medium on the Font form.

- Printer Font Name
- (PCL only) Symbol Set ID

This value defines the character and the character mapping for a particular symbol set. Contact your PCL printer font vendor to obtain this information.

4. After you finish entering information for a barcode-capable printer, click OK.

OneWorld saves the information and clears the revision form. You can continue to enter information for other OneWorld printers that support barcodes, or click Cancel to exit the form.

## To modify OneWorld barcode printer information

- 1. On the Printers menu (GH9013), choose Bar Code Support (P986166).
- 2. On the Work with Bar Code Font form, click Find.

OneWorld printers previously set to support the barcode font appear in the detail area.

3. Choose the printer, the information for which you want to modify, and click Select.

The Bar Code Font Revisions form appears.

4. Change the information on this form as necessary and click OK.

# To copy OneWorld barcode printer information for a new printer

- 1. On the Printers menu (GH9013), choose Bar Code Support (P986166).
- 2. On the Work with Bar Code Font form, click Find.

OneWorld printers previously set to support the barcode font appear in the detail area.

3. Choose the printer, the information for which you want to copy, and click Copy.

The Bar Code Font Revisions form appears.

- 4. Change the name of the printer. You can also change any other information on this form as necessary.
- 5. Click OK to save your information.

## To delete barcode support information from a OneWorld printer

- 1. On the Printers menu (GH9013), choose Bar Code Support (P986166).
- 2. On the Work with Bar Code Font form, click Find.
  - One World printers previously set to support the barcode font appear in the detail area.
- 3. Choose the printer that you want to delete, and click Delete.
- 4. On the Confirm Delete form, click OK.

# Designing Reports to Run on OneWorld Line Printers

When you run a report on a line printer in OneWorld, you must follow certain guidelines to ensure that the information contained in the report prints successfully. These guidelines include font family, font size, grid spacing, the width of the fields on the report, paper dimensions, and line parameters.

This section provides the information necessary to create OneWorld line printer reports.

**Important:** The information in this section is intended for users with previous experience creating OneWorld reports and setting up OneWorld printers. For specific information on these topics, see the following documents:

- Enterprise Report Writing Guide for specific information about working with the Report Design Tool
- Printing OneWorld Reports in this guide
- OneWorld Server and Workstation Administration Guide for information on setting up printers on AS/400, UNIX, and Windows NT servers.

Complete the following tasks:

- Design a OneWorld report to run on a line printer
- Set up a OneWorld line printer
- Print multiple copies to a remote AS/400 line printer

## To design a OneWorld report to run on a line printer

**Important:** In the Batch Versions application, create a version of the report to use only on line printers. Make the following modifications to this report version. Do not make these modifications at the report level. If you make these modifications at the report level, the information in your report might not appear properly on other printer platforms.

- 1. On the Cross Application Development Tools menu (GH902), choose Report Design Tool.
- 2. Open the report with the version that you want to modify to support line printers.
- 3. From the Layout menu, choose Grid Alignment.

The Alignment Grid form appears. On this form, you need to modify the vertical grid spacing for the report.

- 4. Set the value in the Vertical field to 16 and click OK.
- 5. From the Report menu, choose Report Properties.

The Properties form appears. On this form, you need to change the font properties for the report.

- 6. Click the Font/Color tab, set the following font properties, and then click OK:
  - Change the font to Courier New.

The Courier New font provides the best results; however, you can use other fixed-pitch fonts. For example, for reports that contain text in Japanese, users should use the fixed-pitch version of the MS-Gothic font.

- Change the font size to 10.
- 7. Turn on the Apply settings to all objects option to make sure these settings apply to objects that may have individual font settings applied.
- 8. After you change the font properties, you might need to increase the width of some of the fields on your report. Widen fields as necessary to provide enough room for information to appear on your report. Reposition the sections of your report so that all the report objects appear in the detail area.

See the *Enterprise Report Writing Guide* for specific information about formatting your report.

- 9. (Steps 7 through 10 apply to Group sections only.) If some data fields still do not properly align, press and hold the Ctrl key, then click on each field that you want to align. The last field that you choose is the field, the top edge of which you will use to align the other fields.
- 10. From the Layout menu, choose Align.

The Align Objects form appears.

- 11. In the Apply To box, choose the Current section option to enable the Top to Bottom box.
- 12. In the Top to Bottom box, choose the Top Edges option and then click OK.
- 13. When you complete the modifications to your report, save your report version.

### To set up a OneWorld line printer

**Important:** The following steps provide information about the values at which you should set the paper dimensions for a line printer. These steps should be used as a supplement to the steps that describe how to set up a OneWorld printer in the *Working with the Printers Application* section in this guide.

- 1. On the Printers menu (GH9013), choose Printers (P98616).
- 2. Choose the line printer from the detail are and click Select.

The Logical Printer Revisions form appears. On this form, you need to set the columns per inch (CPI), columns per page (CPP), lines per inch (LPI), and the lines per page (LPP). These values determine the paper dimensions that your line printer will use when printing OneWorld reports.

- 3. Set the following values to print on an 8.5 in. x 11 in. piece of paper:
  - Characters Per Inch: 10
  - Characters Per Page: 85
  - Lines Per Inch: 6
  - Lines Per Page: 66

**Note:** You can use the following formula to calculate your paper dimensions:

```
CPP / CPI = width in inches (85 / 10 = 8.5)
LPP / LPI = height in inches (66 / 6 = 11)
```

4. Click OK to save these settings.

#### To print multiple copies to a remote AS/400 line printer

This task is necessary only if the output queue for an AS/400 line printer does not support printing multiple copies. This task applies to remote output queues only. This task must be completed by a system administrator.

- 1. End the remote writer to which the output queue is connected.
- 2. Use the Change Output Queue (CHGOUTQ) command to change the Display Options (DSPOPT) parameter so that it contains the value "XAIX".
- 3. Restart the remote writer.
- 4. Your output queue should now be able to send multiple copies of your documents to the remote printer.

## Work with Servers

The Work With Servers program (P986116) provides a central location from which system administrators can monitor and control the following:

- Server jobs
- OneWorld subsystems

As a system administrator, you can use the Work with Servers program to print, view, remove, terminate, release, or hold any jobs that currently reside in a queue on any OneWorld server. Similarly, workstation users can control only those jobs submitted by them. This option is generally restricted to only those jobs associated with a specific user ID.

You can also use the Work with Servers program to end and to stop OneWorld subsystems. In addition, you can view the status of OneWorld subsystems that are running or are waiting to process jobs.

Working with server jobs
Working with OneWorld subsystems

This section describes the following:

# Working with Server Jobs

Using the Work with Servers application, system administrators can print, view, and delete job records from the outqueue. They can also terminate, release, or hold any jobs that currently reside in a queue on any OneWorld server. Similarly, using the Submitted Reports applications, workstation users can generally control only those jobs submitted by them.

You should use OneWorld security to restrict access to the Work with Servers application. Access to this program should generally be granted only to administrator-level users. This is because the ZJDE0001 version of the Work with Servers program (P986116) allows users to view and control server jobs for all users. End users should be restricted to the ZJDE0002 version which is known as the Submitted Reports application (P986116). This version of the application restricts users to viewing and modifying only those jobs which were initially submitted under their User ID. Both programs are located on the System Administration Tools menu (GH9011).

From within Work with Servers, on the Submitted Job Search form, you can access the following options from the Row menu:

- Print allows you to print jobs with a status of E or D. Using a standard print form, you can print to your default printer or print to another available printer.
- View Job allows you to launch the Adobe Acrobat Reader program and display your report online. You can review your report online and then print to your default printer or another available printer.
- View Log allows you to view the jde.log and the jdedebug.log.
- Delete (found on the toolbar) allows you to delete the record and the job from the outqueue. Use this on jobs with status E or D.
- Terminate ends the job if it is processing. This option does not remove the
  job, but moves it to an E (error) status, thereby allowing a user to view the
  logs.
- Hold stops a job until you release it again.
- Release removes the H (hold) status from a job and sends it into the queue.

Checking	the	status	of re	ports

This chapter contains the following:

Changing the priority and the printer for jobs
Printing jobs
Viewing reports online
Viewing the logs for a job
Terminating jobs
Holding and releasing jobs
Processing Options: Work with Servers (P986116)

## **Checking the Status of Reports**

After you submit your report, you can check the status of your job in the queue. Depending on the status of your job, you can perform tasks such as printing your report, viewing your report output online, deleting your report, and holding your report in the queue.

### To check the status of reports

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which to work and click Select.

The Submitted Job Search form appears. From this form you can print, view, delete, and hold your job. You can also view logs with detailed information about how your report processed.

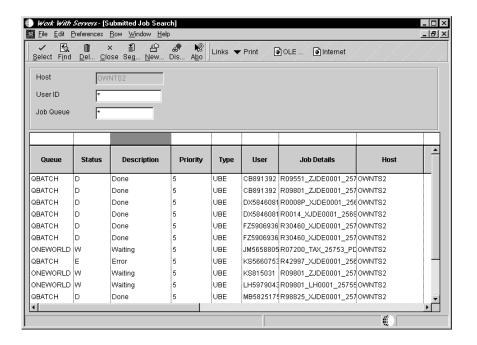
- 4. Complete the following fields, and then click Find to search for submitted jobs:
  - User ID

The default user ID is the user signed onto the current OneWorld session. This user ID can be changed if you wish to work with a report submitted by a different user. You can use a wildcard (\*) to find the user you want.

#### Job Queue

Enter the name of the logical queue on the server for which you want to view jobs.

The detail area of the form displays the jobs and their status. You can use the visual assist in the Status field to read the UDCs for status codes in your installation.



# Changing the Priority and the Printer for Jobs

To move your job up or down in the queue, you can change the priority of the job while the job is at the status of W (Waiting). You might choose to move more important jobs up in the queue and move those with less priority down in the queue. You can also choose to override the location where your job prints.

## To change the priority and the printer for jobs

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which to work.

4. From the Row menu, choose Server Jobs.

The Submitted Job Search form appears. By default, jobs are listed for the User ID for the requesting workstation. Depending on your application security level, you can change the User ID field and the Job Queue field to search for other jobs.

**Note:** A job must be at a status of W (Waiting) to change the priority.

5. Choose a job with which to work and click Select.

The Job Maintenance form appears. On this form, you can review information about your batch job, modify the priority of the job, and change the printer on which the job will print.

- 6. Modify the following information and click OK:
  - Job Priority

Field	Explanation
User ID	For World, The IBM-defined user profile.
	For OneWorld, the creator or submitter of the version or job.
Job Queue	The job queue to which the job was submitted. On the AS/400 this is an actual system job queue. On other systems it is a OneWorld logical queue.
Job Priority	The priority level of a submitted job. Jobs will execute based on this priority. Values 0-9 are valid where 0 is the highest priority.

## **Printing Jobs**

For jobs with a status of D (Done) and E (Error), you can send your job directly to your default printer without viewing the PDF file online. A status of D means that the processing for your job completed successfully. A status of E means that an error occurred during processing. If you print a job with a status of E, you print an error log to aid you when you troubleshoot your report. Refer to *Troubleshooting the Workstation* and *Troubleshooting the Enterprise Server* in the *Server and Workstation Administration* guide for more information about troubleshooting and logs.

# To print jobs

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which to work.
- 4. From the Row menu, choose Server Jobs.

The Submitted Job Search form appears. Jobs specific to your user ID appear in the grid on this form by default. Depending on your security level, you can change the User ID field and the Job Queue field to search for other jobs.

5. Choose the job that you want to print, and then choose from the Row menu.

The Printer Selection form appears. This form provides printer-specific information as well as information about the format of your report.

6. To print your job, click OK.

## **Viewing Reports Online**

After your job finishes processing on the server, you can view the report output online. For most jobs, the output will be in Portable Document Format (PDF) which is viewable with Adobe Acrobat Reader. When you view your report output online, OneWorld also creates a PDF file for the report in the following directory on your workstation:

\b7\PrintQueue

You can attach PDF files to e-mail messages, move or copy the files, and because most current Web browsers can read PDF files, you can post your reports to a Web site. Also, you can copy text from Acrobat Reader to the clipboard and paste the text into other applications.

### **Before You Begin**

Before you view your report online, verify that you have Adobe Acrobat Reader installed on your workstation.

# To view reports online

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which to work.
- 4. From the Row menu, click Select (or choose Server Jobs).

The Submitted Job Search form appears. Jobs specific to your user ID appear on this form by default. Depending on your security level, you can change the User ID field and the Job Queue field to search for other jobs.

5. Choose the job that you want to view, and then from the Row menu, choose View Job.

Adobe Acrobat Reader displays an online version of your report output. Refer to Adobe Acrobat Reader online help for more information about using Acrobat Reader.

## Viewing the Logs for a Job

You can view logs that detail the steps taken while your job processed. From the Submitted Job Search form, you can access the jde.log and the jdedebug.log for your report. These logs are helpful if you need to troubleshoot why a report resulted in error. These logs exist on the machine where the job ran, which might not necessarily be the same machine as your workstation.

The jde.log is a general purpose log used to track error messages generated by OneWorld processing. The jde.log tracks any fault that might occur within OneWorld including whether the sign on is successful. When you are looking for startup errors, you should read the jde.log from the top down. For other errors, you should read from the bottom up.

The jdedebug.log contains API calls and SQL statements as well as other messages. You can use this log to determine the point in time when normal execution stopped. The system does not use jdedebug.log to track errors. Instead, it uses this log to track the timing of OneWorld processes.

#### See also:

• Working with the Workstation Log Files and Working with the Enterprise Server Log Files in the Server and Workstation Administration Guide.

### To view the logs for a job

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose the server that processed the job that you want to troubleshoot.
- 4. From the Row menu, click Select (or choose Server Jobs).

The Submitted Job Search form appears. Jobs specific to your user ID appear on this form by default. Depending on your security level, you can change the User ID field and the Job Queue field to search for other jobs.

5. Choose the job for which you want to view a log, and then choose View Logs from the Row menu.

The View Logs form appears. On this form, you can choose to view the jde.log and the jdedebug.log.

6. Click OK to view the logs.

**Note:** If you choose both the jde.log and the jdedebug.log, the logs open in the same window. To view the logs separately, you must choose the logs separately.

# **Terminating Jobs**

If your job is processing, you can manually terminate the job. When you terminate a job, you do not delete the job, but you move the job to the status of E (Error). With the job at the status of E, you can print an error log or delete the job.

#### To terminate jobs

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

2. Click Find to locate all servers, or use the query by example row to locate a specific server.

- 3. Choose a server with which to work.
- 4. From the Row menu, click Select (or choose Server Jobs).

The Submitted Job Search form appears. Jobs specific to your user ID appear on this form by default. Depending on your security level, you can change the User ID field and the Job Queue field to search for other jobs.

5. Choose the job to terminate, and then choose Terminate from the Row menu.

**Note:** A job must be at a status of P (processing) to terminate the job.

6. Click Find to update the detail area.

The status of the job changes to E (error).

## **Holding and Releasing Jobs**

If a job is at the status of W (waiting), you can hold the job. You might choose to hold a job if the job is large enough to impact the performance of the server on which it processes. You can release the job at a time when an impact to performance is not an issue, for example, after regular business hours.

**Note:** If you want to stop a job that is at a status of P (processing), you must terminate the job. When you terminate a job, you do not remove the job, but you move the job to the status of E (error). You cannot restart a job after you terminate the job. You must resubmit the job to the server.

#### To hold a job

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which to work.
- 4. From the Row menu, click Select (or choose Server Jobs).

The Submitted Job Search form appears. Jobs specific to your user ID appear on this form by default. Depending on your security level, you can change the User ID field and the Job Queue field to search for other jobs.

5. Choose the job to hold, and then from the Row menu, choose Hold.

6. Click Find to update the detail area.

The status of the job changes to H (hold).

## To release a job

1. On System Administration Tools (GH9011), choose Work with Servers (P986116).

The Work with Servers form appears. On this form, you can access a list of servers used to process batch applications.

- 2. Click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which to work.
- 4. From the Row menu, click Select (or choose Server Jobs).

The Submitted Job Search form appears. Jobs specific to your user ID appear on this form by default. Depending on your security level, you can change the User ID field and the Job Queue field to search for other jobs.

5. Choose the job to release, and then choose Release from the Row menu.

The job must be at the status of H (hold).

6. Click Find to update the detail area.

The status of the job changes to reflect the position of the job in the queue, for example, W (waiting), S (in queue), or P (processing).

## Processing Options: Work with Servers (P986116)

### **Security**

This processing option specifies the level of security used when working with servers.

#### 1. Security Flag

Use this processing option to specify how submitted jobs can be viewed. Valid values are:

Blank No Security

- 1 Allow users to view jobs by group.
- 2 Allow users to view only their own jobs.

# Working with OneWorld Subsystems

	various subsystems to offload processing from the enterprise ter provides you with details about:
☐ Understand	ding OneWorld subsystems
Locating C	neWorld subsystems running on a server
☐ Viewing jo	b records for OneWorld subsystems
Terminating	g OneWorld subsystems
Understanding OneV	Vorld Subsystems
_	provides you with a basic understanding of how a subsystem is a within OneWorld. You will also find out how you can enable stems.
This topic consic	lers the following questions:
☐ What are 0	OneWorld subsystems?
☐ How does	OneWorld use subsystems?
☐ How are 0	OneWorld subsystems enabled?

## What Are OneWorld Subsystems?

The term *subsystem* is an industry generic term, usually indicating a system that is a subprocess to an operating system. On AS/400 server platforms, a subsystem is a logical process that is used to run system jobs, whether they are OneWorld or other application jobs. For UNIX, a OneWorld subsystem is functionally equivalent to a daemon. On UNIX and Windows NT server platforms, system jobs are processed in queues. These queues are functionally equivalent to subsystems on the AS/400.

Within OneWorld, subsystems are defined as continuously running batch jobs that run independently of, and asynchronously with, OneWorld applications. These OneWorld subsystem jobs function within the operating system's logical process or queue defined for the server platform. You can configure OneWorld to use one or more subsystems. See *Defining Subsystem Jobs* in the *Tools Guide*.

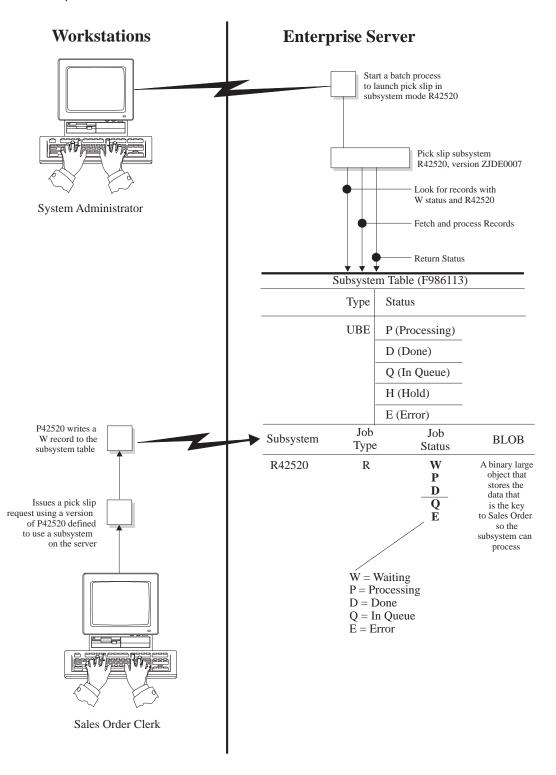
## How Does OneWorld Use Subsystems?

Some OneWorld applications are designed to use subsystems. For example, you can instruct Sales Order Processing to print pick slips through a OneWorld subsystem. You activate a subsystem through the processing options of an interactive application. Then you create a specific version of the interactive application, using that processing option to run the application in subsystem mode. When started, OneWorld subsystems run continuously looking for and processing requests from OneWorld applications. Subsystems run until you terminate them.

Typically, you use subsystem jobs running on the enterprise server to offload processor resources from the workstation. Instead of queuing requests and running them in batches at specified points in the day, you can direct the requests to a subsystem where they are processed in real time. For example, you might be running the Sales Order Entry application on a workstation and want to print pick slips. If you are using a version of pick slips that has the Subsystem Job function enabled, the request is executed by a OneWorld subsystem job. The pick slip request is routed to and processed by the subsystem job on the defined enterprise server. As a result, no additional processing resources are required from the workstation machine to actually print the pick slip.

When an application issues a request for a job to run in a subsystem, it places a record in the Subsystem Job Master table (F986113). These records are identified by subsystem job name and contain status and operational indicators. Embedded in the record is key information that allows the OneWorld subsystem to process the record without additional interaction with the requesting application. The continuously running OneWorld subsystem monitors the records in this table. If the subsystem finds a record with its process ID and appropriate status indicators, it processes the record and updates the status accordingly.

The following illustration shows the logical sequence of events associated with subsystems.



## How are OneWorld Subsystems Enabled?

To prevent excessive processing overhead during server startup and to prevent unnecessary uses of processor resources for OneWorld subsystem jobs that might be in use, you must manually start OneWorld subsystems. This is generally the responsibility of the system administrator or manager-level user. The manual start is done by running a version of a OneWorld batch process that has a processing option set to enable the use of subsystems.

As described below, the manner in which you initially control the creation and start up of these subsystems and queues depends on your server platform.

Platform (Subsystem or Queue)	Description
AS/400 (JDENET)	There is one AS/400 subsystem that is used for OneWorld. This subsystem is automatically started when you issue the OneWorld startup command STRNET. The subsystem name is version-specific. For example, for release B73.1 the subsystem name is JDEB731.
	To process requests destined for OneWorld subsystems, you must define a specific job queue running under the JDENET subsystem. For example, a job queue might be named QBATCH.
	User requests for OneWorld subsystem-defined batch jobs are executed by the job queue based upon definition in the AS/400 user profile.
	See Understanding Batch Process Administration for AS/400.
UNIX (jdequeue)	There can be one or more queues for OneWorld. These queues can be named the same or differently. You define queues by parameters in the startup shell script RunOneWorld.sh.
	To process requests destined for OneWorld subsystems, you must define one or more queues. For example, a jdequeue might be named QBATCH.
	User requests for OneWorld subsystem-defined batch jobs are executed by the job queue, based upon their process ID.
	See Understanding Batch Process Administration for UNIX.
NT (jde.ini settings)	There can be one or more queues for OneWorld. These queues must have the same name. You define queues by settings in the jde.ini file.
	To process requests destined for OneWorld subsystems, you must define the name and number of queues in the [NETWORK QUEUE SETTINGS] section of the jde.ini file. For example, a jdequeue might be named QBATCH.
	User requests for OneWorld subsystem-defined batch jobs are executed by the job queue, based upon their process ID.
	See Understanding Batch Process Administration for NT.

System administrators can display all OneWorld subsystems running on a server by using the Work with Server Jobs application (P986113). Use this application to:

Locate a list of OneWorld subsystems running on a server

- Locate a list of OneWorld subsystem records that are unprocessed (not available for AS/400 servers)
- Locate the current record that a OneWorld subsystem is processing (not available for AS/400 servers)
- Stop or delete any OneWorld subsystem

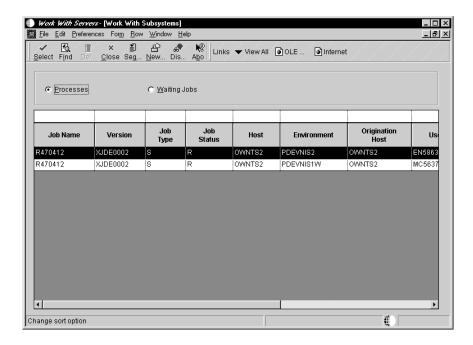
## Locating OneWorld Subsystems Running on a Server

You can use Work With Servers to determine which OneWorld subsystems are currently running or waiting on a particular server. The running subsystems are identified by report number and version.

## To locate OneWorld subsystems running or waiting on a server

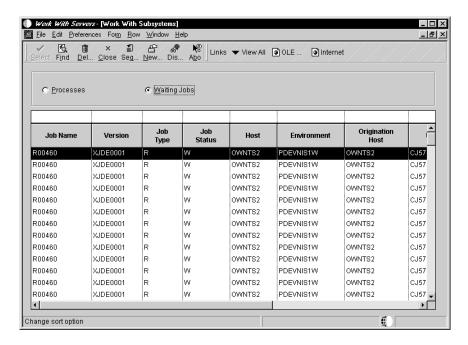
- 1. On System Administration Tools (GH9011), choose Work with Servers (P986116).
- 2. On Work With Servers, click Find to locate all servers, or use the query by example row to locate a specific server.
- 3. Choose a server with which you want to work.
- 4. From the Row menu, choose Subsystem Jobs.
- 5. On Work With Server Jobs, click one of the two options:
  - Processes

A process is a subsystem that is waiting for work. This is identified by an "S" (subsystem job) value in the Job Type field.



Waiting Jobs

Waiting jobs are report jobs that are queued for a subsystem. This is identified by an "R" (subsystem record) value in the Job Type field.



All currently running OneWorld subsystems are displayed. The status of each subsystem is shown by codes in the following fields:

• Job Type

This field indicates whether the job is a subsystem record or a subsystem job. Valid values are:

Value	Description
R	Subsystem Record
s	Subsystem Job

#### Job Status

This field indicates whether the status is a subsystem job or record. Valid values are:

Value	Description
W	Subsystem record waiting
P	Subsystem record processing
E	Subsystem record to end the job
R	Subsystem job running

# Reviewing Job Records for OneWorld Subsystems

Different OneWorld processes write records to the Subsystem Job Master table (F986113). Each record is identified with a status code that identifies subsystem request types and operational status. You can use Work With Server Jobs to view the records in this table.

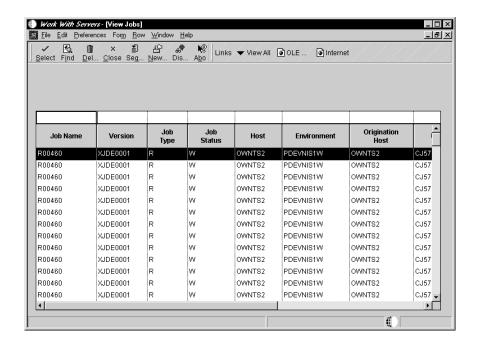
## Before You Begin

Locate a OneWorld subsystem job. See *Locating OneWorld Subsystems* Running on a Server.

## To view job records for OneWorld subsystems

- 1. On Work With Subsystems, click Find, choose a record in the detail area, and then choose View Jobs from the Row menu.
- 2. On View Jobs, click Find.

A list is displayed for all server jobs in the Subsystem Job Master (F986113) with an R (subsystem job running) job type.



## **Terminating OneWorld Subsystems**

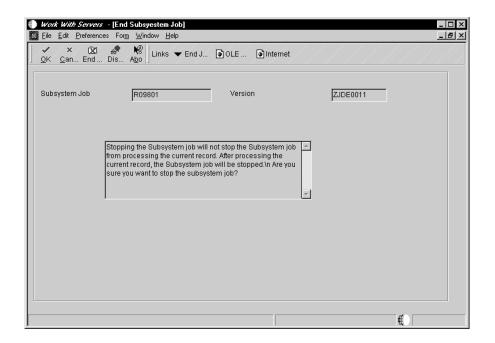
You can use Work With Server Jobs to terminate OneWorld subsystems. Two methods of termination are available:

- Stopping a subsystem job causes it to terminate after it completes
  processing the current record. Additional unprocessed records in the
  Subsystem Job Master table (F986113) will not be processed, and no new
  records can be written. The unprocessed records will essentially be lost.
  That is, the process that initiated the record is not notified that the record
  was not processed.
- Ending a subsystem job causes it to terminate after processing all of the existing subsystem records. No new records can be written to the Subsystem Job Master table (F986113).

## To stop OneWorld subsystems

- 1. On Work With Subsystems, locate a running subsystem.
- 2. Choose the running subsystem that you want to stop.
- 3. From the Row menu, choose Stop Subsystem.

**Note:** If you are viewing Waiting Jobs from Work with Server Jobs, or if you are viewing subsystem jobs by choosing the View Jobs from Work With Server Jobs, the Stop Subsystem selection is disabled from the Row menu selection.

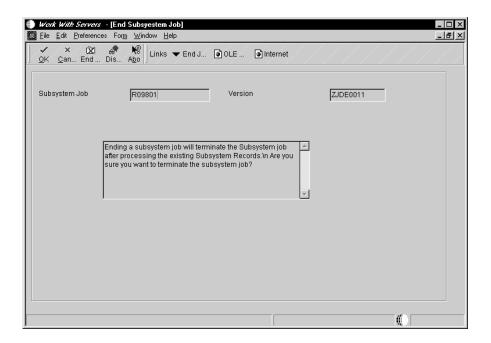


4. On End Subsystem Job, click OK.

## To end OneWorld subsystems

- 1. On Work With Subsystems, locate a running subsystem.
- 2. Choose the running subsystem that you want to end.
- 3. From the Row menu, choose End Subsystem Job.

**Note:** If you are viewing Waiting Jobs from Work With Subsystems, the End Subsystem selection is disabled from the Row menu selection.



4. On End Subsystem Job, click OK.

# Menu Design

You use Menu Design (P0082) to create, change, delete, copy, and filter menus and menu selections. Menu Design assists you in the following:

- Managing menus and menu selections
- Managing text overrides
- Defining runtime messages for menu selections
- Indicating the consequences of using particular menu selections
- Copying menu selections

This section discusses the following:

Working with menus
Working with menu selections
Working with menu selection revision

# **Understanding Menus**

A menu is the entry point for running reports and applications. The Menu Master (F0082) table stores the following information, which identifies and characterizes the menu:

- Identifying information (ID and related system code)
- Level of detail
- Menu classification
- Menu Text Override (F0083)

# Menu Filtering

OneWorld automatically filters menus based on your user ID so that only menu selections that apply to your job appear on your workstation. This feature allows you to maintain one set of menus (one database) with hundreds of menu selections, but you see only those menus that apply to your job.

Menus are filtered so that the following do not appear:

- Menu selections that you or other users do not have authority to access. For example, Employee Information in Human Resources Management.
- Menu selections that are country-code-specific. If your user profile country code matches the country code for that menu, then the selection displays. For example, menu selections that pertain only to Canadian users, such as Canadian tax-related selections, appear only to Canadian users.
- WorldVision menu selections that are not installed on your workstation.
  For example, if WorldVision (a J.D. Edwards AS/400 product) is not
  installed on your workstation, that selection does not appear on the
  menu. You can distinguish a WorldVision menu selection from a
  OneWorld menu selection by looking at the Job to Execute number. A
  WorldVision Job to Execute number begins with a J, for example, J3413.

# **Menu Design Tables**

Menu Design stores information in the following tables:

Menu Master (F0082)	Defines all menus but not the selections.
Menu Selection (F00821)	Contains the type of selection to be executed, selection consequences, and version information.
Menu Text Override (F0083)	Contains menu selection descriptions.
Menu Path (F0084)	Contains the menu selection icons.

# Working with Menus

Menus are the entry point to J.D. Edwards applications and reports. To access an application or report from a menu, the application or report must be attached to a menu selection on the menu.

This chapter describes the following:

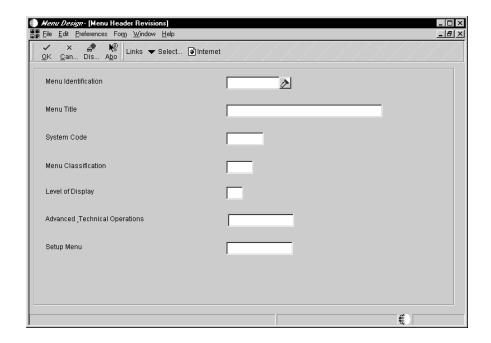
	Defining a new menu
	Reviewing selections for a menu
$\Box$	Printing a menu report

## **Defining a New Menu**

You can define a menu to include selections that enable you to access, from one location, the applications and reports that you need.

## To define a new menu

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, click Add.



- 3. On Menu Header Revisions, complete the following fields:
  - Menu Identification
  - Menu Title
  - System Code
  - Menu Classification
  - Level of Display
  - Advanced & Technical Operations
  - Setup Menu

Field	Explanation
Menu Identification	<ul> <li>The menu name, which can include up to nine characters. J.D. Edwards standards are:</li> <li>Menu numbers are preceded with a G prefix.</li> <li>The two characters following the prefix are the system code.</li> <li>The next characters further identify the menu.</li> <li>The 4th character specifies a specific skill level.</li> <li>The 5th character distinguishes two menus of the same system with the same skill level.</li> </ul>
	For example, the menu identification G0911 specifies the following:  G Prefix  09 System code  1 Display level/skill level  1 First menu

Field	Explanation				
Menu Title	Contains menu titles and menu selection descriptions.				
Menu Classification	The menu classification indicates the type of a menu. For example: a JDE Master menu or Company Master menu.				
Level of Display	The Level of Display field contains a number or letter identifying the level at which menus and processing options are displayed. The levels of display are as follows:  A Product Groups (for example, Job Cost, Manufacturing)  B Major Products (for example, GL, AP)  1 Basic Operations  2 Intermediate Operations  3 Advanced Operations  4 Computer Operations  5 Programmers  6 Senior Programmers.				
Advanced & Technical	For World:				
Operations	The advanced operations key is used to direct the menu selection '27' (Advanced Operations) to the appropriate menu. This menu designation must be preceded with an asterisk (*). For example, the General Accounting Advanced Operations menu would be *A093.				
	Form-specific information				
	For OneWorld:				
	Each menu may optionally have an Advanced & Technical Operations menu to which it is associated and it is displayed as the last menu selection. This is normally used to categorize more advanced tasks.				
Setup Menu	For World:				
	The technical operations control key is used to direct the menu selection '29' (Technical Operations) to the appropriate menu. This menu designation must be preceded with an asterisk (*). For example, the General Accounting Technical Operations Menu would be *A094.				
	Form-specific information				
	For OneWorld:				
	The menu you enter in this field is associated with the menu item description: Setup Menu. This menu is automatically displayed at the bottom of the menu you specify in the Menu Identification field.				

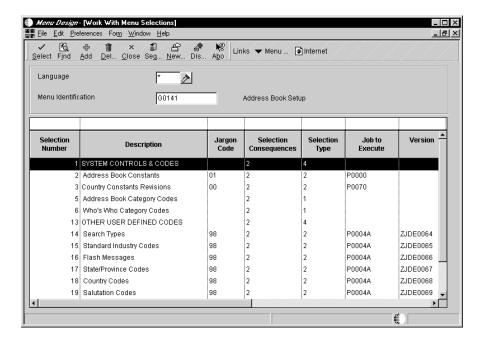
OneWorld Xe (09/00) **8–5** 

## Reviewing Selections for a Menu

You can review the selections included on a specific menu. You can accomplish this from the Work With Menus form or from the Menu Header Revisions form.

## To review selections for a menu

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, locate and choose a menu that you wish to review.



If you are working with the Menu Header Revisions form, choose Selections from the Form menu.

In either instance, the Work With Menu Selections form appears, from which you can view and edit selections for a specific menu.

### See Also:

☐ Working with Menu Selections for more information about editing menu selections.

# Printing a Menu Report

You can print a report that lists the menus. You can print menus only or menus and menu selections. To print a menu report, choose Menu Print from the Form menu.

# **Example: Print Menus Report**

R0082P	J.D. Edwards & Company 4/25/97 13:33:23								
			Print Menus	Page - 1					
-	MenuDescription		SY LOD Cla	3 <u>8</u>					
	DEMC	) APPLICATIONS	00						
	Sel #	Description	Job To	Form	Version	Ctry	Appl	Run Time	SC
-	0	APPLICATIONS	<u>Execute</u>	Name			Ovrd_	_ Message	1
	1	Journal Entries	P0911		ZJDE0001				3
	2	General Journal Posting	R09801						3
	3	Company Numbers and Names	P0010						3
	4	Budget vs.Actual Comparison	P09210		ZJDE0001				2
	5	Account Ledger Inquiry	P0911L						1
	6	Original Budget Update	P14102		ZJDE0001				3
	7	Online Consolidations	P09218		ZJDE0001				1
	8	Manufacturing Variance Inquiry	P3102		ZJDE0001				1
	11	Bill of Material	P3002		ZJDE0001				1
	12	Routings	P3003		ZJDE0001				1
	13	Forecasting	P3460		ZJDE0001				1
	14	Customer Service	P4210		ZJDE0001				1
	15	Planners Workbench	P3401		ZJDE0003				1
	16	Schedulers Workbench	P31225		ZJDE0001				1

## **Working with Menu Selections**

Use Work With Menu Selections when you are:
☐ Adding or changing a menu selection
☐ Adding an application to a menu
☐ Adding or changing web addresses on OneWorld Explorer Help
☐ Creating a web view subheading on a menu
☐ Linking menus
☐ Creating fast path selections

Work With Menu Selections displays available selections for the selected menu.

## Adding or Changing a Menu Selection

To add a menu selection for an application or report, you must first name the menu selection by assigning a description and unique selection number.

After naming a menu selection, you must indicate the selection type and define it.

- Selection Type specifies the type of program that is executed for the menu selection. You use OneWorld Application, OneWorld Report, WorldVision, or Windows Application to execute a specific application, report, or program.
- The Subheading selection type does not perform an action. You use it to logically group menu selections on the menu. Subheading selections appear on the menu only in web view.
- You use the Menu selection type to call another menu.

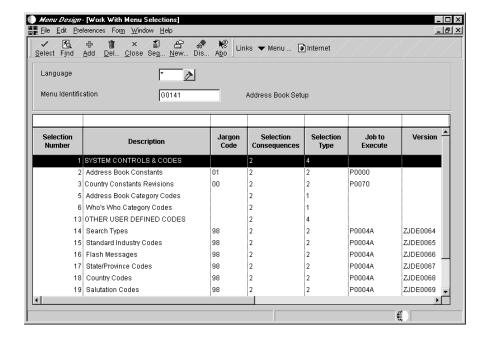
**Note:** When you delete a menu, you also delete any menu selections available on that menu. The applications called by the menu selections are not deleted, and you can access these applications from other menus.

Adding or changing a menu selection consists of the following:

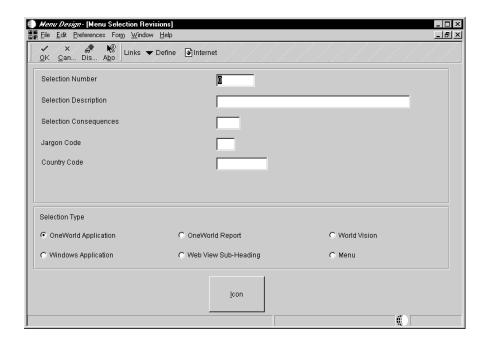
- Naming a menu selection
- Defining the menu selection

### To name a menu selection

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, locate the menu that has a selection that you want to name and click Select.



3. On Work With Menu Selections, click Add or choose an existing selection to change.



- 4. On Menu Selection Revisions, complete the following required fields:
  - Selection Number
  - Selection Description
  - Selection Consequences

If you chose an existing selection to change, the Selection Number field is disabled.

- 5. Complete the following optional fields, if necessary:
  - Jargon Code
  - Country Code

If the base language is a double-byte language, a Search Description field is shown below the Country Code field. Enter the single-byte search description to be used by Menu Word Search. Menu Word Search uses only single-byte search descriptions.

Field	Explanation
Selection Number	Used to determine the order of menu items and allow them to be selected by this number.
Selection Description	Contains menu titles and menu selection descriptions.
Selection Consequences	The selection consequences tell the user what the consequences are in taking that specific menu selection.

OneWorld Xe (09/00) 8–11

Field	Explanation
Jargon Code	A code used to designate the reporting system number for entering specific text or "jargon". See User Defined Codes, system code '98', record type 'SY' for a list of valid values.
Country Code	The Menu Country/Region Codes field contains the region code (3 bytes) for all 24 menu selections for each menu record. This region code is used to mask those international selections that are country specific; i.e. 1099 processing in the US and VAT tax processing in Europe.

### To define the menu selection

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- Locate the menu for which you want to define a menu selection and click Select.
- 3. On Work With Menu Selections, choose an existing selection to define and click Select.
- 4. On Menu Selection Revisions, indicate one of the following Selection Types:
  - OneWorld Application
  - OneWorld Report
  - World Vision
  - Windows Application
  - Web View Sub-Heading
  - Menu
- 5. From the Form menu, choose Define.

A form that is specific to the selection type appears.

- 6. Define options for the selection type indicated.
- 7. Click OK.

## Adding an Application to a Menu

You can add OneWorld applications and reports, WorldVision applications, and Windows applications to a menu. You can also link a menu to another menu.

Complete the following tasks:

Add a OneWorld application to a menu

- Add a OneWorld report selection to a menu
- Add a WorldVision application to a menu
- Add a Windows application to a menu

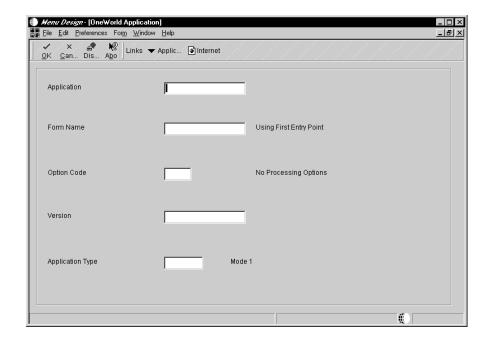
### To add a OneWorld application to a menu

You can use this procedure to add a OneWorld application created in Forms Design as a menu selection.

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. Locate the menu on which you want to add a OneWorld application and click Select.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, complete the following required fields:
  - Selection Number
  - Selection Description
  - Selection Consequences

If you chose an existing selection to change, the Selection Number field is disabled.

- 5. Click the following option, and then choose Define from the Form menu:
  - OneWorld Application



- 6. On OneWorld Application, complete the following fields:
  - Application
  - Form Name

You can use this field to define a specific entry point for the OneWorld application. If you leave this blank, the program's first entry point is used.

- Option Code
- Version
- Application Type
- 7. From the form menu, choose Application to view a list of available applications. Likewise, from the Form menu, you can choose Versions to search for available versions.

Field	Explanation
Option Code	For World, this code specifies the function of a menu selection using the DREAM Writer when F18 is pressed. F18 may be locked out by simply replacing code 1 with 3 or code 2 with 4. This code, in conjunction with the version number and the option key, provide the following functions:
	Code  1 version — mandatory; option key — form i.d. F18 displays processing options. Selection = blind DREAM Writer execution.  2 version — blank; option key — form i.d. F18 displays DREAM Writer versions list. Selection = DREAM Writer versions list.  2 version — not blank; option key — form i.d. F18 displays DREAM Writer versions list. Selection = blind execution, batch.
	Review the HELP instructions for Menu Information (Menu Locks) (P0090) for a detailed explanation of codes related to job submission and control.
	For OneWorld, this code specifies whether the user will be prompted for additional information prior to running the application. Available values are:  O No processing options  Blind execution (no prompt)  Prompt for version  Prompt for values

Field	Explanation
Version	Version identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by J.D. Edwards.
Application Type	Complete with a user-defined, alphanumeric value. This field exists in the JDE user profile and within each menu and menu selection record. When security is active, the value of this field in the user profile is compared with the value in the corresponding menu lock. The values must be equal in the user profile and menu lock to access the menu. A blank in this field in the user profile gives the user all authority. A blank in this field in the menu record indicates no security exists on this menu.

### To add a OneWorld report selection to a menu

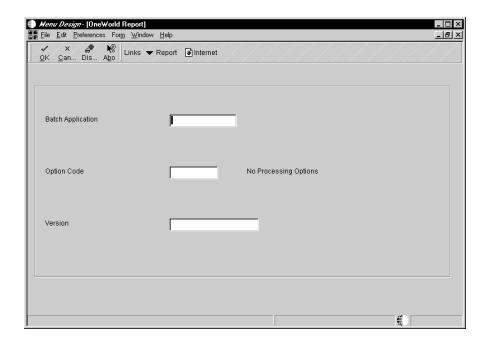
You can add a report created in the OneWorld Report Design tool as a menu selection.

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. Locate the menu on which you want to add a OneWorld report selection and click Select.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, complete the following required fields:
  - Selection Number
  - Selection Description
  - Selection Consequences

If you chose an existing selection to change, the Selection Number field is disabled.

5. Click the OneWorld Report option, and then choose Define from the Form menu.

OneWorld Xe (09/00) 8–15



- 6. On OneWorld Report, complete the following fields:
  - Batch Application
  - Option Code
  - Version

Use Form menu options to view and choose from a list of reports and versions.

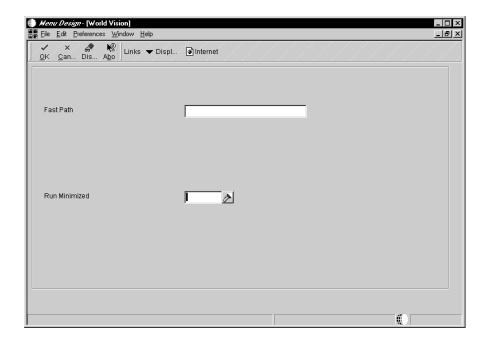
# To add a WorldVision application to a menu

You can add a WorldVision application as a menu selection.

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. Locate the menu on which you want to add a WorldVision selection, and click select.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, complete the following required fields:
  - Selection Number
  - Selection Description
  - Selection Consequences

If you chose an existing selection to change, the Selection Number field is disabled.

5. Click the WorldVision option, and then choose Define from the Form menu.



- 6. On WorldVision, complete the following fields:
  - Fast Path
  - Run Minimized

Field	Explanation
Fast Path	The path field contains the path used for client based menus. The path describes where the application is located on your computer or network. A path includes the drive, folders, and subfolders that contain the application to be executed.
	To specify the path for a World Vision menu selection, the path includes the selection number, slash, menu.
Run Minimized	The Run Minimized flag determines if a Windows application is to be minimized to an icon when you open it.

OneWorld Xe (09/00) 8–17



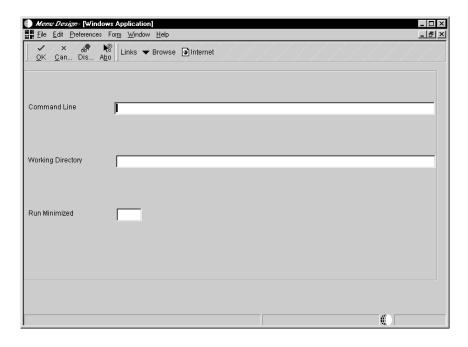
### To add a Windows application to a menu

You can add any Windows applications as menu selections. For example, you can add the Windows programs such as Calendar, Clock, Note Pad, or Write.

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. Locate the menu on which you want to add a Windows application.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, complete the following required fields:
  - Selection Number
  - Selection Description
  - Selection Consequences

If you chose an existing selection to change, the Selection Number field is disabled.

5. Click the Windows Application option, and then choose Define from the Form menu.



- 6. On Windows Application, complete the following fields, or click the Browse button to search for the Windows application:
  - Command Line

Enter the file name of the Windows application that you want to add to the OneWorld menu, such as winword.exe.

Working Directory

Enter the path where the Windows application resides on your local machine.

Run Minimized

Field	Explanation
Command Line	The path field contains the path used for client based menus. The path describes where the application is located on your computer or network. A path includes the drive, folders, and subfolders that contain the application to be executed.
	To specify the path for a World Vision menu selection, the path includes the selection number, slash, menu.
Working Directory	The path field contains the path used for client based menus. The path describes where the application is located on your computer or network. A path includes the drive, folders, and subfolders that contain the application to be executed.
	To specify the path for a World Vision menu selection, the path includes the selection number, slash, menu.

## Adding or Changing Web Addresses on OneWorld Explorer Help

You can add web addresses or change some of the addresses that appear on the Help menu of OneWorld Explorer. From the Help menu on OneWorld Explorer, there is an option called "J.D. Edwards on the Web." From this option, a list of web addresses appears, and a line separates the addresses. The addresses above this line, which include J.D. Edwards Home Page and Contact Us, are hard-coded into OneWorld, which means that you cannot change them. You can, however, change the web addresses below the line, or add your own web addresses to the list.

## To add or change web addresses on OneWorld Explorer Help

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, type HELP in the Menu ID query-by-example field, and then click Find.

The Web Access menu appears.

3. Choose the Web Access menu and click Select.

- 4. On Work With Menu Selections, click Add to add a new web address, or choose a row and click Select to change an existing web address.
- 5. On Menu Selection Revisions, complete the following required fields:
  - Selection Number
  - Selection Description
  - Selection Consequences

If you chose an existing selection to change, the Selection Number field is disabled.

- 6. Click the Windows Application option, and then choose Define from the Form menu.
- 7. On Windows Application, complete the following fields:
  - Command Line

Enter the web address that you want to add to the Help menu, such as http://www.jdedwards.com.

Working Directory

Because you are entering a web address, you do not need to complete this field.

Run Minimized

## Creating a Web View Subheading on a Menu

Use web subheadings to logically group menu selections on the menu. Subheadings appear on the menu in web view only and do not perform an action.

### To create a web view subheading on a menu

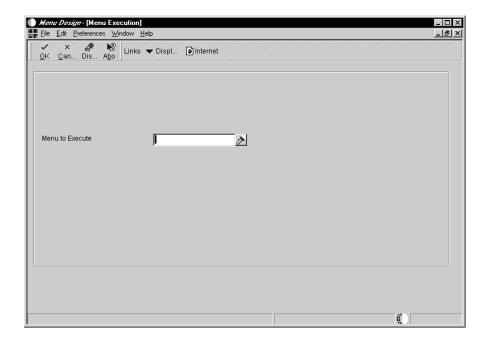
- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. Locate the menu on which you want to create a subheading.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, complete the following field:
  - Selection Number
- 5. Click the Web View Sub-Heading option.
- 6. Click OK to complete the web view subheading assignment.

## **Linking Menus**

You can add a menu selection that displays another menu.

### To link menus

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. Locate the menu on which you want to add a selection.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, click the Menu option.
- 5. From the Form menu, choose Define.



- 6. On Menu Execution, complete the following field, or click the visual assist to search for menus:
  - Menu to Execute

Field	Explanation
Menu to Execute	The specific menu to be executed as a selection on a menu.

OneWorld Xe (09/00) 8–21

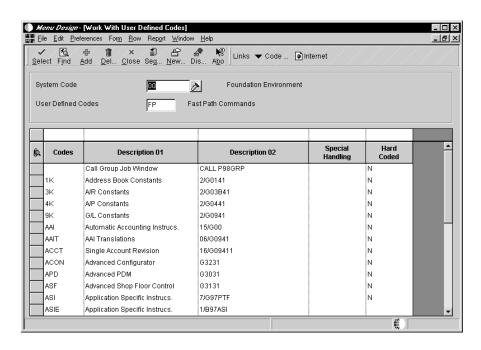
## **Creating Fast Path Selections**

You can quickly move among menus and applications by using fast path commands. A fast path command is:

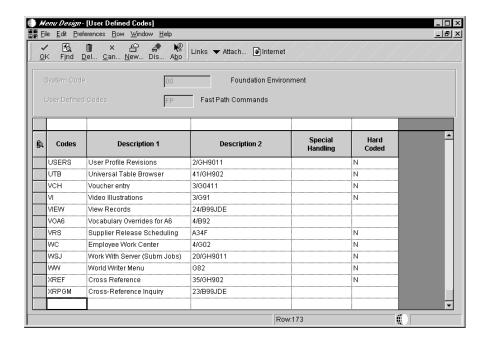
- An abbreviation that is either shipped with J.D. Edwards demo data or that you define to suit your business environment. For example, the fast path OMW accesses the application Object Management Workbench, so that you can work with OneWorld objects.
- A combination of a menu selection and a menu number. For example 2/G01 (menu selection number 2 on menu number G01) takes you to Work With Addresses in Address Book. As you become more familiar with OneWorld menu abbreviations, you might find that fast paths provide a quicker way to navigate to an application.

## To create a fast path selection

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, locate the menu that has a selection for which you want to create a fast path.
- 3. On Work With Menu Selections, from the Form menu, choose Fast Path Revs.



4. On Work With User Defined Codes, click Add.



- 5. On User Defined Codes, click inside the detail area, and then press CTRL + END to display the bottom of the detail area.
- 6. To add a user defined code for a new fast path, complete the following required fields in the last row of the detail area:
  - Codes
  - Description 1
  - Description 2

You enter the abbreviation for the fast path in the Code field. Enter the description of the abbreviation, such as the name of the menu selection, in the Description 01 field. Enter the selection number and menu number in the Description 02 field.

To determine the selection number for the fast path that you created (for example, selection number 2 on menu G01), use Work With Menu Selections. Do not count the menu selections in OneWorld Explorer because the menu might be filtered.

## **Working with Menu Selection Revisions**

☐ Changing menu selection text

Renumbering a menu selection

<ul><li>☐ Copying a menu selection</li><li>☐ Changing menu text for languages</li></ul>	languages, change menu selection text, or renumber a menu selection. This chapter describes the following tasks:
☐ Changing menu text for languages	☐ Copying a menu selection
	☐ Changing menu text for languages

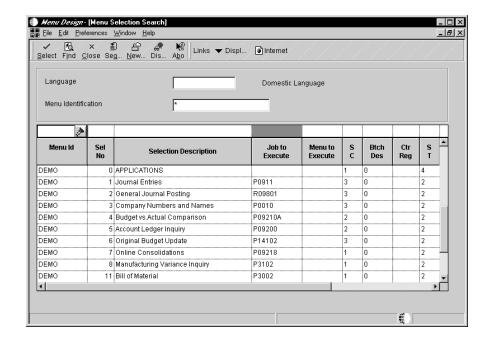
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## Copying a Menu Selection

You can copy an existing menu selection and attach it to another menu.

## To copy a menu selection

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, locate the menu that has a selection that you want to copy.
- 3. On Work With Menu Selections, click Add.
- 4. On Menu Selection Revisions, enter the new selection number, and then choose Copy from the Form menu.



5. On Menu Selection Search, choose an existing menu selection.

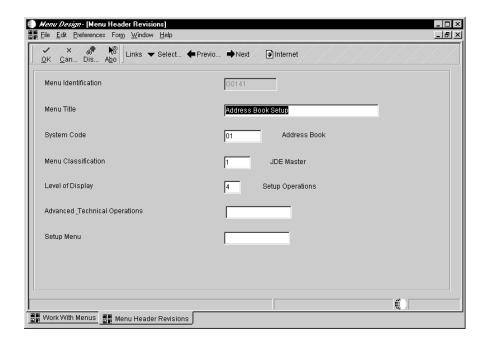
The selection description, consequences, and type are inserted into the newly added menu selection.

## **Changing Menu Text for Languages**

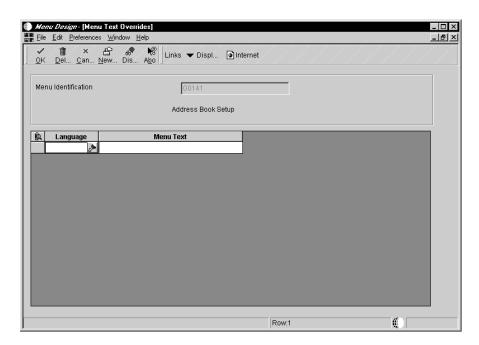
You can use Title Overrides to change the language and description of a menu selection.

### To change menu text for languages

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, locate the menu for which you want to change menu text.
- 3. On Work With Menus, choose Header from the Row menu.



4. On Menu Header Revisions, from the Form menu, choose Title Overrides.



- 5. On Menu Text Overrides, enter the desired language code (such as S for Spanish) and text description (such as the Spanish description of the menu selection) in the following fields and click OK.
  - Language
  - Menu Text

Field	Explanation
Language	A user defined code (system 01/type LP) that specifies a language to use in forms and printed reports.
	Before any translations can become effective, a language code must exist at either the system level or in your user preferences.
Menu Text	Contains menu titles and menu selection descriptions.

## **Changing Menu Selection Text**

You use Text Overrides to change a menu selection's text.

### To change menu selection text

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, locate the menu for which you want to change menu selection's text.
- 3. On Work With Menu Selections, choose the menu selection that you want to change and click Select.
- 4. On Menu Selection Revisions, choose Text Overrides from the Form menu.
- 5. On Menu Text Overrides, complete the following fields and click OK:
  - Language
  - Menu Text

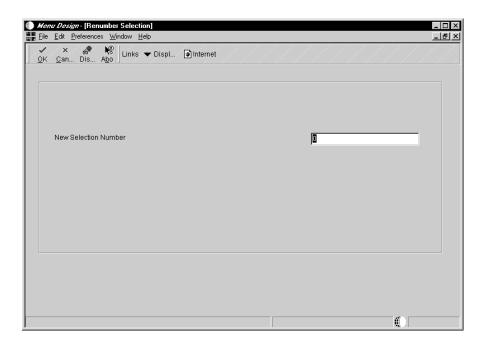
Changes in menu text are not displayed until the changed menu is closed and reopened. You can also choose Refresh from the View menu to update the menu text.

## Renumbering a Menu Selection

You can renumber menu selections from both Work With Menu Selections and Menu Selection Revisions. You can edit each selection to change the sequence of selections on a menu. You cannot rearrange menu selections by clicking and dragging them.

### To renumber a menu selection

- 1. On System Administration Tools (GH9011), choose Menu Design (P0082).
- 2. On Work With Menus, find and choose the menu for which you wish to change the menu selection number.
- 3. On Work With Menu Selections, choose the menu selection you want to change and click Select.
- 4. On Menu Selection Revisions, from the Form menu, choose Renumber.



- 5. Complete the following field, and click OK.
  - New Selection Number

Field	Explanation
New Selection Number	Used to determine the order of menu items and allow them to be selected by this number.

## **User Profiles**

A user profile defines a specific user or group of users to OneWorld. Profiles define such information as the group to which a user belongs, a list of environments that a user or group can select when signing onto OneWorld, and the language preference of the user or group.

This section defines the concepts of user profiles and how to use the User Profiles (P0092) application.

Understanding user profiles
Adding new users
Setting up user profiles
Setting up user roles

This section contains the following:

## **Understanding User Profiles**

You can use the User Profiles application (P0092) to define specific users or groups to OneWorld. This definition includes:

- The group to which a user belongs, such as an accounts payable clerk, who is part of the AP group. Groups are an important aspect of OneWorld. By assigning users to groups, system administrators can set user preferences and securities based on the groups rather than the individual user.
- The environments that the user can select when starting OneWorld.
- The language preference and country code for the text that displays on OneWorld's menus, forms, and country-specific applications.

This chapter discusses the following topics:

How group profiles make profiling easier
Tables used by the User Profiles application

## **How Group Profiles Make Profiling Easier**

Group preferences eliminate the need to set up preferences for each individual user profile. By assigning individual users to a group, you can perform assignments once for the group and have those settings available to all of the individual users that belong to that group. Of course, you can also specify different preferences for each user. The individual user settings override the group settings, but if no user profile information exists, OneWorld takes the information from the group profile. OneWorld uses groups for the following purposes:

- Environments
- User overrides
- Application security
- Creation of signon security records

## Tables Used by the User Profiles Application

The User Profiles application (P0092) uses the following tables:

- Library Lists User (F0092)
- User Display Preferences (F00921)
- User Display Preferences Tag File (F00922)
- User Access Definition (F00925)
- Library List Control (F0093)
- Library List Master File (F0094)

## **Adding New Users**

You can create user profiles one at a time using the User Profiles interactive application (P0092), or you can simultaneously create multiple profiles by using batch processes. When you are ready to create user profiles for the first time, you might need to create hundreds of profiles. In this case, use the batch processes to create the profiles. But if you only need to add a few users, use the User Profiles application.

This topic is a checklist for all the steps needed to add a new user. These steps do not include installing OneWorld on a workstation or third-party setup issues, such as assigning network user IDs.

This topic contains the following:

Adding an individual user

Adding multiple users

## Adding an Individual User

The following is a checklist of the steps that you need to perform when adding user profiles one at a time.

## To add an individual user

- 1. If you plan to create a new group for the user that you are adding, add an Address Book record with a valid search type code (for example, E for employee). See *Entering Address Book Records* in the *Address Book Guide*.
- 2. If the existing group profiles are not acceptable for this new user, add a group profile. See *Creating User and Group Profiles* in this section for information.
- 3. Add an Address Book record for the new user. See *Entering Address Book Records* in the *Address Book Guide*.
- 4. Add a user profile and assign the user to a group. See *Creating User and Group Profiles* in this section for information.
- 5. Add signon security records for the user. See *Working with Signon Security* in this guide for information.

- 6. Add any security workbench overrides for the user if the user needs different security than the group. See *Working with Security Workbench* in this guide for information.
- 7. Populate the machine table for the user's machine. See *Defining Machines* in the *Package Management Guide* for information.
- 8. Add the user's machine as a subscriber for all publisher tables that should be replicated to the user's workstation. See *Setting Up Data Replication* in this guide for information.
- 9. Add any new user overrides for the user, if the user needs different user overrides than the group. See *Working with User Overrides* in this guide for information.

## **Adding Multiple Users**

The following is a checklist of the steps that you need to perform when you use the batch process to add multiple user profiles simultaneously. This batch process automates the process of user profile creation.

If you have the processing option for user profiles set to validate address book numbers, you should begin at Step 1. See *Understanding Processing Options for User Profiles* in this section for additional information. If you do not have the processing option enabled, begin at Step 2.

When you decide which group a user should reside in, consider application security as the most important group. This is because application security has the most extensive setup, and managing overrides to the group security is more difficult than, for example, managing overrides to deployment preferences.

**Note:** Signon security is not based on groups, because individuals must have their own OneWorld passwords. There is a program with signon security to quickly create individual security records by group, but after the records are created, security is assigned by individual. See *Working with Signon Security* in this guide for information.

## To add multiple users

- 1. Using the Address Book Revisions application (P010102), create address book records for groups that you will use in user profiles.
- 2. Using the User Profiles application (P0092), add the group profiles. See *Creating User and Group Profiles* in this section for information.
- 3. Populate the various Address Book tables. If you are migrating data from a non-OneWorld system, you can populate the data tables with a table conversion. Otherwise, you can manually add data to the Address Book tables.

- 4. Run the User Profile Creation (R0092) batch process to create user profile records from existing Address Book records. Normally this report is based upon Address Book records with a search type for employees (E). You have the option of picking one default group to put everyone in or running the report more than once to put people in different groups. See *Creating Profiles Using a Batch Process* in this section for information.
- 5. Adjust each user's group assignments. Determine in which what group you want an individual placed and manually assign each user to a group. Change the user's environments if they are not standard to that group. See *Setting Up User Profiles* in this section for information.

The following settings are dictated by group:

- Environments
- User Overrides
- Application Security
- 1. Run the User Profiles Summarization (R00921) batch process to view your new user profiles. See *Summarizing Group Profiles* in this section for information.
- 2. Create security workbench records for all groups and any individual overrides to those groups. See *Working with Security Workbench* in this guide for information.
- 3. Create signon security records. You can create signon security records for all individuals within a group by entering one record for the group. See *Working with Signon Security* in this guide for information.
- 4. Manually populate the Machine/Group Identification table (F00960). This table is automatically populated each time a machine signs onto OneWorld. However, if you intend to use schedule packages, or if you set the machine up for data replication before users have signed onto OneWorld, you must manually populate this table.
- 5. Create one replication publisher record for each table that you plan to replicate. Run the Create Publisher and Subscriber Records (R00960) batch process to populate the subscribers for that publisher with the information from the machine table. You only need to run this report to create one set of subscriber records, because replication has a copy button that you should use to create additional publisher/subscriber records. See *Setting Up Data Replication* in this guide for information.
- 6. Create user overrides for groups. Normally you will not create any overrides for individuals, because they can easily create their own as they use the software. See *Working with User Overrides* in this guide for information.

## **Setting Up User Profiles**

This topic describes the different ways to use the User Profile application (P0092) to set up user profiles. When setting up profiles, the system administrator should perform the following task.

### To set up user profiles (overview)

- 1. Create all of the group profiles for the enterprise.
- 2. Create a user profile for every user.

Optionally, assign that user to a group profile.

- 3. Assign to each group or user the following preferences:
  - Environments, to determine the environments that you want to be available to each group or user.
  - Display preferences, to determine OneWorld display characteristics such as language, date format, and country code. The Display preferences are controlled on the User Profile Revisions form.

**Note:** If you are setting up user profiles during the installation process, you *must* sign onto your deployment server using the deployment environment. After you have completed the installation process, you can add or modify user profiles from any machine *except* the deployment server.

This topic contains the following:

Creating and modifying user and group profiles
Copying user and group profiles
Assigning environments to user and group profiles
Assigning business preferences to user and group profiles
Understanding processing options for user profiles
Creating profiles using a batch process

OneWorld Xe (09/00) 9–9

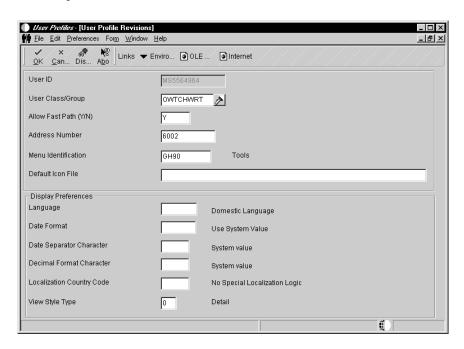
## Creating and Modifying User and Group Profiles

The system administrator needs to create a user profile for every user. The user profile defines certain setup and display features, such as access to fast path, language, date format, or country code. The administrator should first create all of the group profiles needed for the enterprise. This makes creating profiles easier, because instead of defining specific environments, packages, and machine configurations to each user, administrators can define them for the group. If an individual in a group needs a different setup, you can assign different setups at the user level, which overrides the group settings.

If you select a country code for a user or group, OneWorld's menu filtering process will display for that user or group any special menu selections unique to that country code. For example, if you entered CAN (Canada), that user or group would see on the appropriate menu the Canadian Tax Information application, which users without that country code would not see.

### To create and modify user and group profiles

- 1. On the System Administration Tools (GH9011) menu, choose User Profiles (P0092).
- 2. On the Work With User Profiles form, do one of the following operations:
  - If you want to create a new profile, click Add.
  - If you want to modify an existing profile, click Find, choose a profile in the detail area, and then click Select.



- 3. On the User Profile Revisions form, in the header area, do one of the following to create an individual or group profile:
  - To create an individual profile, do the following:
    - In the User ID field, enter the user ID for the individual.

When you modify user or group profiles, this field displays the user ID or the name of the group.

**Note:** You cannot type new information in this field when you modify a profile.

- In the User Class/Group field, enter the group to which the individual belongs, such as ACCOUNTING. You can leave this field blank if the user does not belong to a group.
- To create a group profile, do the following:
  - In the User ID field, enter the group name, such as ACCOUNTING.
  - In the User Class/Group field, type \*GROUP

**Important:** You can modify the group to which a user belongs by entering a new group name in this field; however, when you modify profile information for a group, you must use the \*GROUP literal value. Do not modify this field for group profiles.

- 4. In the header area of the form, complete the remaining fields.
  - Allow Fast Path (Y/N)
  - Address Number
  - Menu Identification
  - Default Icon File
- 5. In the Display Preferences box, complete the following fields, and then click OK.
  - Language
  - Date Format
  - Date Separator Character
  - Decimal Format Character
  - Country
  - View Style Type

Field	Explanation
User ID	For World, the IBM-defined user profile.
	For OneWorld, the identification code for a user profile.
User Class/Group	A profile used to classify users into groups for security purposes. Some rules for creating a User Class/Group are as follows:  • The 'Class/Group' profile must begin with * so that it does not conflict with any System profiles.  • The 'User Class/Group' field must be blank when entering a new group profile.
Allow Fast Path (Y/N)	The Fast Path flag is used to specify whether individual users may use the "Fast Path" method of processing within the J.D. Edwards menu program.
	This data field allows the values of blank, Y or N. blank user is allowed to use fast paths Y user is allowed to use fast paths N user is NOT allowed to use fast paths.
	Form-specific information
	If you choose No, OneWorld will not display the fast path bar. If you set this in conjunction with the Menu Identification field on this form, you will restrict the user to the initial menu and those menus called by the initial menu.
Address Number	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.
Menu Identification	<ul> <li>The menu name, which can include up to nine characters. J.D. Edwards standards are:</li> <li>Menu numbers are preceded with a G prefix.</li> <li>The two characters following the prefix are the system code.</li> <li>The next characters further identify the menu.</li> <li>The 4th character specifies a specific skill level.</li> <li>The 5th character distinguishes two menus of the same system with the same skill level.</li> </ul>
	For example, the menu identification G0911 specifies the following:  G Prefix  09 System code  1 Display level/skill level  1 First menu
Default Icon File	The path field contains the path used for client based menus. The path describes where the application is located on your computer or network. A path includes the drive, folders, and subfolders that contain the application to be executed.

Field	Explanation
Language	A user defined code (01/LP) that specifies a language to use in forms and printed reports.
	Before any translations can become effective, a language code must exist at either the system level or in your user preferences.
Date Format	This is the format of a date as stored in the database. If you leave this value blank, the value will display according to the settings of the operating system on the workstation. With NT, the Regional Settings in the Control Panel control the settings for the operating system of the workstation.
Date Separator Character	The character entered in this field is used to separate the month, day, and year of a given date.
	NOTE:  • If an asterisk is entered (*), a blank is used for the date separator.  • If left blank, the system value is used for the date separator.
Decimal Format Character	The character entered in this field is used to signify the fractions from whole numbers (the positions to the left of the decimal).
	If left blank, the system value is used as the default.
Country	A user defined code (00/CN) that identifies a country. The country code has no effect on currency conversion.
	The Address Book system uses the country code for data selection and address formatting.
View Style Type	The view style determines how new menu information is displayed to the user in the OneWorld Explorer.

## **Copying User and Group Profiles**

You can copy all or part of a user profile. When you copy an entire user or group profile (display and environment preferences), you are creating a new user profile with the information from another profile. When you copy part of a user profile, you are copying the environment preferences from another profile to an already existing user profile.

### To copy user or group profiles

- 1. On the System Administration Tools menu (GH9011), choose User Profiles (P0092).
- 2. On the Work With User Profiles form, locate a user profile, and do one of the following:
  - To copy an entire profile (the display, environment, and deployment preferences), click Copy. The User Profile Revisions form appears. Because this creates a new profile, the user profile that you create cannot already exist in OneWorld.

See *Creating User and Group Profiles* in this section for more information.

- To copy environment preferences, from the Row menu, choose Copy Environment. The User Environment Revisions form appears. This copies environment preferences from one user profile to another. The user profile that you copy to must already exist.
  - See Assigning Environments for User and Group Profiles in this section for more information.
- 3. In the User ID field, enter a user ID or group name to copy the profile into, and change any other information. Click OK when you are finished.

## **Assigning Environments to User and Group Profiles**

You can assign a list of environments that each group or user can choose from when starting OneWorld. Each time users start OneWorld they can choose from the environments assigned for their group if they do not have a user profile-specific environment assignment. You can assign more than one environment from which a user can choose.

### To assign or delete environments

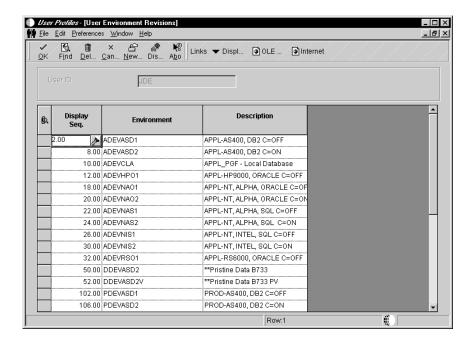
1. On the System Administration Tools menu (GH9011), choose User Profiles (P0092).

The Work with User Profiles form appears.

2. Click Find, and then choose a user profile.

3. From the Row menu, choose Environments.

The User Environment Revisions form appears. This form displays the list of environments available for a particular group.



- 4. To add a new environment, complete the following fields on the last row:
  - Display Seq
  - Environment
- 5. To delete an environment from the list, choose the environment and click Delete.
- 6. On the Confirm Delete form, click OK.

Field	Explanation
Display Seq.	A number that the system uses to sequence information.
Environment	The name associated with a specific list of libraries. The J98INITA initial program uses these library list names to control environments that a user can sign on to. These configurations of library lists are maintained in the Library List Master table (F0094).
	For OneWorld, this field represents a valid environment that can be used to run OneWorld. The environment encompasses both a path code (objects) and a data source (data). When put together, users have a valid workplace within OneWorld.

# **Assigning Business Preferences to User and Group Profiles**

You can assign business preferences to user profiles to create customized processes in conjunction with the OneWorld Workflow application. You define the codes for the preferences based on industry, business partner, or customer. You need to create a Workflow process that begins based on whether a specific code resides in the user profile.

For example, you assign the code CUS for a customer business preference, then create a Workflow process that begins whenever a user profile with the CUS business preference enters a sales order. The Workflow process might send a message, update a database, start another application, and so on.

### See Also

- Creating and Modifying User and Group Profiles (System Administration)
- Creating Workflow Processes (Enterprise Workflow Management)

# To assign a business preference to user and group profiles

1. On the System Administration Tools menu (GH9011), choose User Profiles (P0092).

The Work with User Profiles form appears.

2. Click Find, choose a user profile, and then click Select.

The User Profile Revisions form appears.

3. From the Row menu, choose Business Preferences.

The Business Preferences form appears.

- 4. Complete any of the following fields and click OK:
  - Industry Code

This field associates the user profile with a specific industry, such as manufacturing.

• Business Partner Code

This field associates the user profile with a specific business partner.

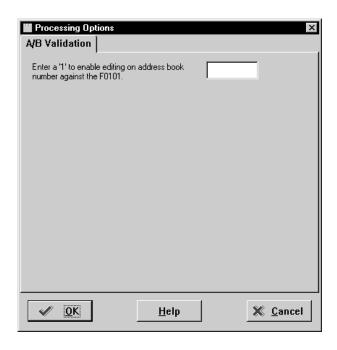
Customer Code

This field associates the user profile with a specific customer.

**Note:** You can click Cancel on the Business Preferences form to cancel the addition of the current business preference.

# **Understanding Processing Options for User Profiles**

The User Profiles application (P0092) has the following processing option:



On the Processing Options form, enter "1" to enable, or "0" (or leave blank) to disable Address Book validation.

- When enabled, this processing option causes User Profiles to validate, upon creation of a user profile, each new user ID against the Address Book Master table (F0101). As a result, you cannot create a user profile for a user that is not already defined in the Address Book Master table. J.D. Edwards recommends that you enable this setting to ensure that Work Center operates correctly. That application requires valid address book numbers.
- When disabled, this processing option allows you to create user profiles for Address Book entries that do not yet exist in the Address Book Master table.

# **Creating Profiles Using a Batch Process**

If Address Book records already exist for employees, you can run a batch process to automatically create user profiles from those Address Book records. This process can save time, ensure accuracy between your Address Book and user profile records, and ease the transition of taking OneWorld to production.

You can create user profiles through the Create User Profile from A/B records batch process (R0092). With this process you can assign display and environment preferences to users. This process allows you to create literally hundreds of new user profiles at a time.

**Note:** If you need to add just a few users, you should use the User Profile (P0092) application.

The User Profiles Summarization (R00921) report is useful if you need to review a list of user and group user profile definitions. This report summarizes the environment or environments assigned to a group, lists the users in the group, and notes any additional environments assigned specifically to an individual user. J.D. Edwards provides two default versions that allow you to summarize either all groups or only specific groups.

Complete the following tasks:

- Run the User Profiles Creation (R0092) batch application
- Run the User Profiles Summarization (R90021) report

## **Before You Begin**

- ☐ Create all of the *group* profile information using the User Profile application (as explained in this section). You should already have defined the following:
  - Group profiles
  - Environments that the groups can access

# To run the Create User Profiles from A/B Records (R0092) batch application

- 1. On the Advanced Operations (GH9012) menu, choose Create User Profiles from A/B Records (R0092).
- 2. On the Work With Batch Versions form, choose the J.D. Edwards default version (XJDE0001) or the equivalent for your installation, and then click Select.
- 3. On the Versions Prompting form, click Data Selection, and then click Submit.
- 4. On the Data Selection form, create a logic statement that describes the set of users for which you want to create profiles. This form already has a search type of "E" (employees) populated, which assumes that the users are all employees. You might want to narrow this selection by submitting it only for a range of employees.

Processing Options

Processing Processing Con Processing Con

1. Enter a "1" to run in Proof Mode. A blank defaults to Final Mode.

After you complete the Criterion Design form, the Processing Options form appears.

5. On the Processing Options form, enter the following information:

<u>H</u>elp

• Option 1: Enter one of the following values:

✓ <u>0</u>K

• Enter 1 to run this report in proof mode, which provides an example of what would happen if you were to run the report in final mode.

X Cancel

- Leave blank to run this report in final mode, which creates the user profiles you specified and creates a report showing the profiles created.
- Option 2: Enter one of the following values to define the user profile record being created for each user:
  - Enter 1 to populate the User ID field with the users' address book numbers plus their initials.

**Note:** Typically, user profiles are created with the users' initials preceding their Address Book number.

• Leave this field blank to use just the address book number.

The following are the user profile fields you need to complete for Option 2:

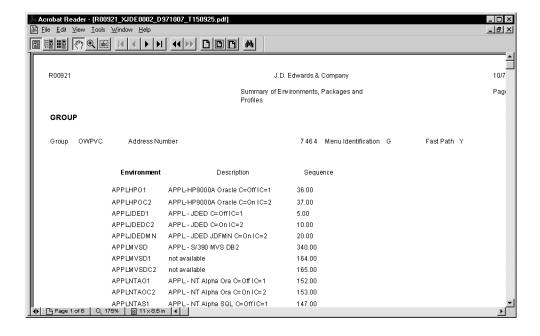
- Group
- Fast Path
- Language

- Date Format
- Data Separator Character
- Data Format Character
- Country
- Option 3: Enter any additional environments that you want the user to have access to instead of the environments already established for the user's group.

# To run the User Profiles Summarization (R00921) report

- 1. On the Advanced Operations menu (GH9012), choose Summarize Group Profile Information (R00921).
- 2. On the Work With Batch Versions form, choose a version and click Select. The J.D. Edwards default version XJDE0001 creates a report for all group profiles in the enterprise. The J.D. Edwards default version XJDE0002 creates a report about a specific group profile that you specify.
- 3. On the Versions Prompting form, click Data Selection and click Submit.
- 4. On the Data Selection form, create a logic statement that describes the group profiles that you want to summarize. Click OK when finished.

The following is an example of the User Profiles Summarization Report (R0092):



# **Setting up User Roles**

After you have set up user profiles, you can assign roles. Roles define the tasks that users see when they work in ActivEra Solution Explorer. In an everyday work environment, very few users need or want to have access to every task in the ActivEra system. For example, an A/P clerk or A/P manager needs access only to the applications that allow them to do their jobs, such as Voucher Journal batch reports. They are not likely to have any use for applications that run benefits administration tasks.

As an administrator, you can simplify the A/P clerk's and the A/P manager's job by creating roles for both and then defining the tasks that people in each role require. When users in the A/P clerk role work in ActivEra Solution Explorer, they see only the tasks allowed by their role. All other tasks are disabled. The A/P manager sees a different set of tasks. For instance, the clerk needs to work with a suite of applications related to supplier and voucher maintenance, while the manager does not need these applications but does need to run A/P and G/L reports that the clerk does not.

In addition, you can set up more than one role for a user. Creating additional roles for a user allows you to operate more flexibly because the multiple-role user is not restricted to a single task view. That user can switch task views depending on the work required.

To set up roles, you first create the roles you need for your organization and store the values in a UDC table. Next, you link users and groups to roles. After you have completed these tasks, users who have multiple roles can apply a role and change the task view in ActivEra Solution Explorer.

**Note:** Roles only have meaning when they are associated with tasks. At the time that you create a task to be displayed in the ActivEra Solution Explorer, you associate one more roles with the task. For a full discussion of associating a task with a role, see the *Task Setup* section of the *ActivEra Solution Accelerator Suite Implementation* guide.

Implementing roles
Creating a role
Assigning a role to a user
Deleting a user role

This chapter discusses the following topics:

☐ Modifying a user role

# **Implementing Roles**

OneWorld implements the assignment of roles using the following tables:

- User Defined Code Types (F0004)
- User Defined Codes (F0005)
- Role Relationships (F95921)

The F0004 table contains a record for role relationships:

- H95, or Tech Resources/Applications
- RL, or Roles

The F0005 table stores the values that define the role relationships. The F95921 table stores the relationships between users and roles. The primary keys in the F95921 are:

- Member
- Member of
- Effective Date

To create, delete, or modify a role, and to assign a role to a user, you use the following OneWorld interactive applications:

- P0004 (User Defined Codes)
- P95921 (Work With Role Relationships)

# Creating a Role

To create a role, you access the H95/RL record from the User Defined Codes application (P0004). Using the P0004 application, you can create as many roles as necessary. OneWorld stores the values in the User Defined Codes table (F0005).

### ▶

### To create a role

- 1. On System Administration Tools (GH9011), choose User Defined Codes (P0004).
- 2. On Work with User Defined Codes, enter H95 to the Product Code control.

- 3. Enter RL to the User Defined Codes control and click Add.
- 4. On User Defined Codes, go to the bottom of the form and complete the following fields:
  - Codes
  - Description
  - Special Handling (optional)
  - Hard Coded
- 5. After you have created as many roles as necessary, click OK.

# Assigning a Role to a User

After you have defined and created roles for your organization, you must associate users with roles. This association helps to define what kind of tasks a user sees in a task view in the ActivEra Solution Explorer.

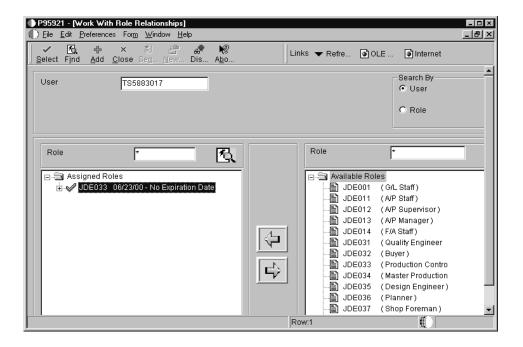
Your initial job is to assign default roles to users. The default role establishes the tasks that the user will see upon signing on. If you do not assign a default role, then the user will see all available tasks. Any other roles that you assign, such as a system role or a role that which you define as neither default nor as system, are subservient to the default role. Users can see the tasks that apply to these other roles only by applying them in a task view. For details on how to apply roles for end users, see the *OneWorld Foundation* guide.

Because the default role designation controls the tasks that the user sees on signon, you can assign only one default role to a user. Although at present the system role is only a secondary role to the default, you can assign only one system role. If you want to add more than one secondary role to the default, simply do not define a new role as either default or system.

### To assign a role to a user

1. Launch the Work with Role Relationships form (P95921).

The Work with Role Relationships form appears.



2. Enter a user ID in the User control and click Find.

If you have not yet assigned a role, the Assigned Roles folder for the user is empty.

- 3. In the Available Roles list, click a role.
- 4. Click the arrow pointing toward the Assigned Roles list.

The Role Revisions list appears.

- 5. In the Roles Revision form, complete the following fields:
  - Effective Date
  - Expiration Date
- 6. To make the role a default role, choose one or neither of the following options:
  - Default
  - System

Remember that you can assign only one default and one system role to a user. If you have assigned one of each and want to assign additional roles, do not choose either of the options.

# **Deleting a User Role**

If a user switches to a new role and no longer performs the tasks defined in his or her previous role, you can delete the old role.

### To delete a user role

- 1. Launch the Work with Role Relationships form (P95921).
- 2. Enter a user ID in the User control and click Find.
- 3. In the Assigned Roles list, click a role.
- 4. Click the arrow pointing toward the Available Roles list.

OneWorld deletes the role from the Assigned Roles list.

# Modifying a User Role

You might need to modify, rather than delete a user's role. For instance, you might want to change the user's default role but retain the former default role. In this case, you modify the existing role, removing the role's default status, but retaining it as a role to which the user is assigned.

## To modify a user role

- 1. Launch the Work with Role Relationships form (P95921).
- 2. Enter a user ID in the User control and click Find.
- 3. In the Assigned Roles list, click a role you want to modify and click Select.
- 4. In the Roles Revision form, make any needed modifications to the user role and click OK.

# Security

OneWorld security enables a security administrator to control security for individual users and for groups of users. The security administrator can control (secure or unsecure) users and groups from the following features:

- Application security. Controls access to or installation of specific applications.
- Action security. Controls the ability to perform specific actions, such as adding, changing, deleting, selecting, or copying.
- Table row security. Controls access to a specific list or range of records within a table.
- Table column security. Controls access to a specific column within a table. Columns are represented in OneWorld as a field on a form or report.
- Processing option security. Controls whether users can view or change
  the values for processing options, which would affect how the associated
  application works. It also controls whether users are allowed to prompt
  for versions of that application.
- Tab security. Controls access to tabs on a form.
- Exit security. Controls access to the menu bar exits on forms.
- Exclusive application security. Controls access to secured information using one exclusive application.
- External calls security. Controls access to external call applications.
- ActivEra security. Controls access to ActivEra features.
- User signon and database security. Prevents user access to the database from outside of OneWorld.

The Security Workbench application (P00950) uses the Security Workbench table (F00950).

The User Security application (P98OWSEC) uses the OneWorld Security table (F98OWSEC).

The Security Workbench application is also used to set up security for eight ActivEra features. Setting up security correctly ensures that users in the system have permission to perform only those actions essential to the completion of their jobs.

This section describes the following:

Understanding Security Workbench
Working with Security Workbench
Understanding signon security
Working with user security
Activera portal configuration
Solution Explorer security

# **Understanding Security Workbench**

chapter describes the following information you need to understand ity Workbench:
Understanding users, groups, and *PUBLIC
Understanding how OneWorld checks security
Understanding cached security information
Understanding security types
Understanding OneWorld object-level security
Security and coexistence with WorldSoftware
Identifying users and objects for security

# Understanding Users, Groups, and \*PUBLIC

The OneWorld security administrator can set up security for:

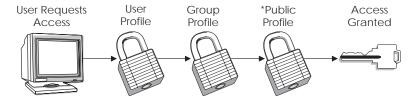
- A particular user. This options controls security by a specific OneWorld user ID.
- A group of users. This option controls security by group ID. This allows
  you to group users based on similar job requirements, such as putting all
  of the accounts payable clerks in one group, whose group ID could be
  AP.
- All users. This option controls security for all users, designated by the ID type \*PUBLIC in the Group ID field. The designation \*PUBLIC is a special group ID within OneWorld that automatically includes all users within it. You can use this ID to apply security even if you do not specifically have a record set up for it in user profiles.

# **Understanding How OneWorld Checks Security**

When a user attempts to access an application or perform an action, OneWorld does the following:

- 1. Checks for any security for that particular user ID.
  - If security exists for that individual user ID, OneWorld displays a message informing the user that they cannot proceed.
- 2 If there is no security for that user ID, OneWorld checks the group profile (if that user is part of a specific group), and \*PUBLIC, in turn, for security.

If no security is established at any of these levels, OneWorld lets the user continue. OneWorld also provides software license security through protection codes, and requires user validation at signon and when accessing new data sources.



# **Understanding Cached Security Information**

OneWorld caches certain security information from the Security Workbench table (F00950). This information is cached in the workstation's memory cache for OneWorld. If system administrators make changes to the F00950 table, those changes will not be immediately realized on workstations that are logged on while the changes are being made. Such workstations must log off and log back on before the security changes are enabled.

# **Understanding Security Types**

At specific object levels, you can set the following levels of security, alone or in any combination, for users and groups:

Level of security	Description
Application security	Secures users from running and/or installing a particular application or a particular form within an application.
Action security	Secures users from executing a particular action, such as adding, deleting, revising, inquiring, or copying a record.
Row security	Secures users from accessing a particular range or list of records in any table.
	For example, if you secure a user from accessing data about business units 1 through 10, the user cannot view the records that pertain to those business units.
	Use row security to duplicate WorldSoftware Cost Center security.
Column security	Secures users from viewing a particular field or changing a value for a particular field. This can be a database or non-database field that is defined in the data dictionary, such as the work/calculated fields.
	For example, if you secure a user from viewing the Salary field on the Employee Master application, the Salary field does not appear on the form when that user accesses that application.
Processing option security	Secures users from changing the values of processing options, or from prompting for versions and prompting for values for specific applications.
	For example, if you secure a user from changing the processing options for Address Book Revisions, the user could still view the processing options (if you did not secure the user from prompting for values), but would not be able to change any of the values.
	If you secure a user from prompting for versions, the user would not be able to see the versions for a specific application, which means that the user would not be able to choose a different version of an application from the version that the administrator assigned.

OneWorld Xe (09/00) 10-5

<b>Level of security</b>	Description
Tab security	Secures users from seeing a tab or tabs on a given form.
Exit security	Secures users from menu bar exits on OneWorld forms. These exits call applications and allow users to manipulate data. Exit security also restricts use of the hyper-button.
Exclusive application security	Sets security specific to an application regardless of any other security that might be set. When you set exclusive application security for a user, that user gains access to just the specific application that you define. All other security still applies.
External calls security	Secures users from accessing stand-alone executables that exist external to OneWorld. These external executables, which might include design tools, system monitors, and debugging tools, are specific to OneWorld.
ActivEra security	Secures users from accessing or making changes to the following ActivEra features: ActivEra Portal, task documentation, fine cut, favorites, ActivEra Explorer, rough cut, and Universal Director.

# **Understanding OneWorld Object-Level Security**

OneWorld security is at the object level. This means that you can secure specific objects within OneWorld, which provides flexibility and integrity for your security. For example, you can secure a user from a specific form, and no matter how the user tries to access the form (using a menu or any application that calls that form), OneWorld prevents them from accessing that form. Though setting up good security is always a challenge, OneWorld simplifies the process by allowing you to set security for hundreds of objects at a time by securing all objects on a specific menu, or securing all objects under a specific system code. But remember, it is the objects that are secured; OneWorld does not support menu or system code security. Object security provides a higher integrity. For example, if you were to secure a specific menu to prevent users from accessing the applications on that menu, the users might still be able to access those applications through some other menu or some other application that accesses those applications that you were trying to secure.

# Security and Coexistence with WorldSoftware

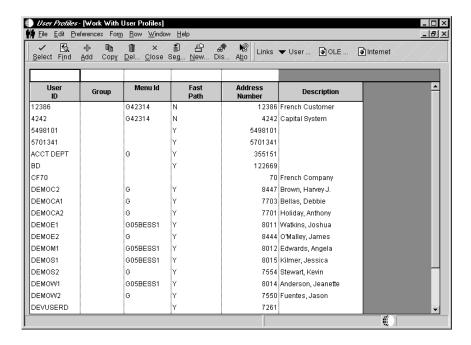
If you have a coexistence environment where you share data and applications between OneWorld and WorldSoftware, you need to maintain two independent sets of security profiles: one for WorldSoftware and one for OneWorld.

# Identifying Users and Objects for Security

To set up security you first need to identify the users and the objects that you want to secure, as explained in this task.

# To identify users and objects for security

1. Identify the users for whom you want to set up security. Use the Work With User Profiles form to find a user or group ID. See *Setting Up User Profiles* in this guide for information on how to use this form.



- 2. Identify what you want to secure:
  - For all security, identify which application, form, report, or table
    that you want to secure. This is the object name, such as F0101 for
    the Address Book Master file, P0101 for the Address Book
    application, or \*ALL for all objects.
  - For only row and column security, also identify which columns (data items) that you want secured. This is the data dictionary item name, such as MCU for the Business Unit/Branch Plant field, or CO

for the Company Name. Column security can apply to dictionary items that are not in database tables.

# Working with Security Workbench

	chapter describes the following information that you need to work with ity Workbench:
	Setting up application security
	Setting up action security
	Setting up row security
	Setting up column security
	Setting up processing option security
	Setting up tab security
	Setting up exit security
	Setting up exclusive application security
	Setting up external calls security
	Copying security for a user or a group
	Deleting security on the Work with User/Group Security form
See Also	
•	Working with the Object Configuration Manager in the CNC Implementation Guide for information about securing the query by example row

# **Setting Up Application Security**

fast path tool

This task explains how to add, revise, and remove application security. You can secure users from running and/or installing a particular application or a particular form within an application. This task also explains how to add a \*ALL object, how to change all of the applications for a particular user or group from

Setting Up User Profiles in this guide for information about securing the

unsecured to secured, and how to set security for all but one form in an application.

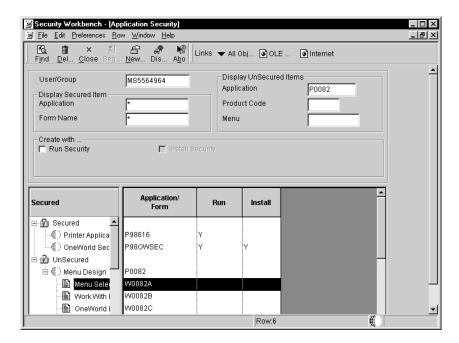
# To set up application security

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security, then Application.

The Application Security form appears.



- 3. Complete the following fields, and click Find:
  - User/Group

Enter a complete user or group ID, which includes \*PUBLIC, but not wildcards.

The following fields are mutually exclusive:

Application

Enter an application name, such as P0101. You can also use \*ALL to display all applications.

### Form Name

Enter a form name, such as W0101G. You can also enter an asterisk by itself to display all forms.

Current security settings for the user or group appear under the Secured node in the tree. Expand the node to view the individual applications and forms that are secured. After expanding the node, the secured applications and forms also appear in the detail area.

- 4. Complete *one* of the following fields that appear in the Display UnSecured Items heading, and click Find:
  - Application

You can enter \*ALL in this field to select *all* OneWorld objects.

In the detail area, this special object appears as \*ALL and displays the security that you defined for the object, such as Run Security or Install Security. The \*ALL object acts as any other object and you can use the Revise Security and Remove All options from the Row menu.

- Product Code
- Menu

You must perform this step before you can add new security. This step provides a list of applications and forms from which to choose.

Your search (application, product code, or menu) appears under the UnSecured node. Expand the node to view individual applications and forms that do not already have security set for them. After you expand the node, the individual applications and forms also appear in the grid.

For example, to set security on the Menu Design application, you first need to display it under the UnSecured node. To do this, enter P0082 in the Application field, and click Find. The Menu Design node appears when you expand the UnSecured node. You could then expand Menu Design to secure a form within the application.

- 5. Perform the following actions as necessary to add, change, or remove application security:
  - Add security to an application
  - Change security for an application
  - Remove security from an application



### To add security to an application

Under the Create With heading, click one or both of the following options:

- Run Security
- Install Security

Use the Install Security option for just-in-time installation only.

Then do one of the following:

- Drag applications and forms from the UnSecured node to the Secured node.
- From the Row menu, choose All Objects to move all applications to the Secured node.
- From the Row menu, choose Secure to All to move all objects that are beneath the UnSecured node to the Secured node.

The applications or forms now appear under the Secured node with the appropriate security.

For example, to set run security on the Menu Design application (P0082), click the Run Security option, and then drag the Menu Design node from the UnSecured node to the Secured node. The detail area reflects the run security that you set for this application. This would mean that the user that you entered could *not* run the Menu Design application.



### To change security for an application

Under the Secured node, choose an application or form, click one or both of the following options, and then from the Row menu, choose Revise Security:

- Run Security
- Install Security

Use the Install Security option for just-in-time installation only.

The values under the Run and Install fields in the detail area change accordingly.

## To remove security from an application

Do one of the following:

- Under the Secured node, choose an application or form and click Delete.
- Drag an application or form from the Secured node to the UnSecured node.
- On the Row menu, choose Remove All. This moves all applications and forms from the Secured node to the UnSecured node.

Field	Explanation
User/ Group	For World, The IBM-defined user profile.
	For OneWorld, the identification code for a user profile.
Object Name	The OneWorld architecture is object based. This means that discrete software objects are the building blocks for all applications, and that developers can reuse the objects in multiple applications. Each object is stored in the Object Management Workbench. Examples of OneWorld objects include: <ul> <li>Batch Applications</li> <li>Interactive Applications</li> <li>Business Views</li> <li>Business Functions</li> <li>Event Rules</li> <li>Media Object Data Structures</li> </ul>
Object	A user defined name or remark.
Security Type	<ul> <li>OneWorld Security Type options are:</li> <li>Action Security. Places security to enable or disable users from using specified functions such as Add, Change, Delete, and Copy.</li> <li>Application Security. Places security to enable or disable users from viewing or using specified applications or reports.</li> <li>Column Security. Places security on specified data fields to be non-display or read only.</li> <li>Row Security. Places security to enable or disable users from performing Add, Change, Delete or View actions to records from the database.</li> <li>Process Option Security. Places security on viewing or changing the values of processing options, or places security on prompting for versions for specific applications.</li> </ul>
Description	A user defined name or remark.

OneWorld Xe (09/00) 10–13

Field	Explanation
Data Item	An identifier that refers to and defines a unit of information. It is a 32-character, alphabetical field that does not allow blanks or special characters such as \$ % & , . + or @.
	The data item cannot be changed.
	It forms the C-code data name (for example AddressNumber) that is used in business functions, data structures, and event rules.
	Also identify a data item by the alias or alpha description.
From Value	The From Data Value is used by the row security routines to determine a lower range for the data item in the specified table. It is used in conjunction with the Thru Data Value to define the range of data that the security applies to.
Thru Value	The Thru Data Value is used by the row security routines to determine a upper range for the data item in the specified table. It is used in conjunction with the From Data Value to define the range of data that the security applies to.
Alias	For World, the RPG data name. This data field has been set up as a 10-byte field for future use. Currently, it is restricted to 4 bytes so that, when preceded by a 2-byte table prefix, the RPG data name will not exceed 6 bytes.
	Within the Data Dictionary, all data items are referenced by this 4-byte data name. As they are used in database tables, a 2-character prefix is added to create unique data names in each table specification (DDS). If you are adding an error message, this field must be left blank. The system assigns the error message number using next numbers. The name appears on a successful add. You should assign error message numbers greater than 5000. Special characters are not allowed as part of the data item name, with the exception of #, @, \$.
	You can create protected data names by using \$xxx and @xxx, where you define xxx.
	For OneWorld, a code that identifies and defines unit of information. It is an 8-character, alphabetical code that does not allow blanks or special characters such as: % & , . +.
	Create new data items using system codes 55-59. You should name your new data items with a dollar sign (\$). For example, \$DTAI.
	The alias cannot be changed.

Field	Explanation
View	This code designates whether a user has the authority to view data either on a specific application or form (processing option and column security) or for a specific table and data item (row security). This code is set up through Security Workbench by user or group for every table, application, or form requiring security. *ALL can be used to designate all tables or applications.
Add	This code designates whether a user has the authority to perform an add, either on a specific application or form (action and column security) or for a specific table and data item (row security). This code is set up through Security Workbench by user or group for every table, application, or form requiring security. *ALL can be used to designate all tables or applications.
Change	This code designates whether a user has the authority to perform changes, either on a specific application or form (action, processing option, and column security) or for a specific table and data item (row security). This code is set up through Security Workbench by user or group for every table, application, or form requiring security. *ALL can be used to designate all tables or applications.
Delete	This code designates whether a user has the authority to perform deletes, either on a specific application or form (action security) or for a specific table and data item (row security). This code is set up through Security Workbench by user or group for every table, application, or form requiring security. *ALL can be used to designate all tables or applications.
OK/ Select	This code designates whether a user has the authority to perform operations associated with the OK or Select button on a specific application or form (action security).
Сору	This code designates whether a user has the authority to perform operations associated with the Copy button on a specific application or form (action security).
Scroll to End	This code designates whether a user is given the option to scroll to the end of the data selected or if they will only be given the choice to view it a page at a time. This option is application or form specific (action security).
Prompt for Versions	This code designates whether a user will be allowed to prompt for the version of an application to run from a menu selection. This option is application specific and is set up by the user.

Field	Explanation
Prompt for Values	This code designates whether a user has the authority to 'VIEW' records in programs that are using Action Code Security. The code is set up in Action Code Security Revisions (P0003) by user for every program requiring security by action code.
Run	This code designates whether a user has the authority to run a specific application.
Install	This code designates whether a user has authority to run a Just In Time Installation (JITI) of a specific application.
Syst Code	A user defined code (98/SY) that identifies a J.D. Edwards system.

# **Setting Up Action Security**

This task explains how to add, revise, and remove action security. You can secure users from executing a particular action, such as adding, deleting, revising, inquiring, or copying a record. At the end of this task are additional topics explaining how to add a \*ALL object and how to move all of the applications for a particular user or group from unsecured to secured.

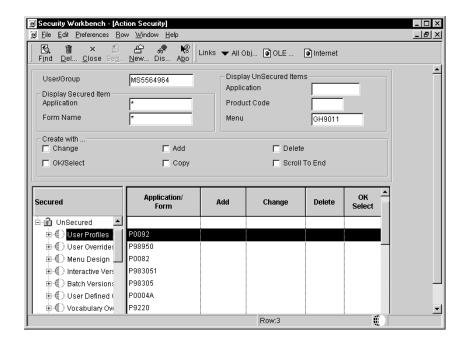
# To set up action security

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security, and then choose Action.

The Action Security form appears.



- 3. Complete the following fields, and click Find:
  - User/Group

Enter a complete user or group ID, which includes \*PUBLIC, but not wildcards.

The following fields are mutually exclusive:

Application

Enter an application name, such as P0101. You can also enter \*ALL to display all applications.

Form Name

Enter a form name, such as W0101G. You can also enter an asterisk to display all forms.

Current security settings for the user or group appear under the Secured node in the tree. Expand the node to view the individual secured applications and forms. After expanding the node, the individual applications and forms that are secured also appear in the detail area.

- 4. To search on applications and forms that you want to secure, complete *one* of the following fields that appear under the Display UnSecured Items heading, and click Find. You must perform this step before you can add new security, because this step provides a list of applications and forms from which to choose.
  - Application

Enter an application name, such as P0101. You can also enter \*ALL to display all applications.

- Product Code
- Menu

Your search (application, product code, or menu) appears under the UnSecured node. Expand the node to view individual applications and forms. After expanding the node, the individual applications and forms also appear in the detail area.

For example, to set security on applications under the System Administration Tools menu, you would enter GH9011 in the Menu field, and click Find. All of the applications and menus attached to GH9011 appear after you expand the UnSecured node. You could then expand the applications and menus.

- 5. Perform the following actions as necessary to add, change, or remove action security:
  - Add action security
  - Change action security
  - Remove action security

# To add action security

Under the Create With heading, click any of the following options:

- Change
- Add
- Delete
- OK/Select
- Copy
- Scroll To End

Then do one of the following:

- Drag applications and forms from the UnSecured node to the Secured node.
- From the Row menu, choose All Objects to move all applications to the Secured node.
- From the Row menu, choose Secure to All to move all objects beneath the UnSecured node to the Secured node.

The applications or forms now appear under the Secured node with the appropriate action security.

For example, to set delete security on an application, click the Delete option. Next, drag the application from the UnSecured node to the Secured node. The detail area would reflect the delete security that you set for these applications. This would mean that the user that you entered could *not* perform the delete action on any applications that you placed under the Secured node.

# To change action security

Under the Secured node, choose an application or form, click any of the following options, and then from the Row menu, choose Revise Security:

- Change
- Add
- Delete
- OK/Select
- Copy
- Scroll To End

The values under the Add, Change, Delete, OK Select, Copy, and Scroll to End fields in the detail area change accordingly.

# To remove action security

Do one of the following:

- Under the Secured node, choose an application or form and click Delete.
- Under the Secured node, drag an application or form from the Secured node to the UnSecured node.
- On the Row menu, choose Remove All. This moves all applications and forms from the Secured node to the UnSecured node.

# **Setting Up Row Security**

This task explains how to add and revise row security. You can secure users from accessing a particular range or list of data in any table. Use row security sparingly because it can have an adverse affect on performance. Additional processing occurs for each data item that you set with row security.

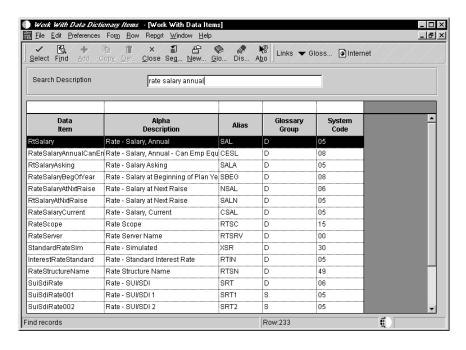
You can set up row security at three levels: user, group and \*PUBLIC. OneWorld first looks for row security at the user level, then at the group level, and then \*PUBLIC. If you set any security at a higher level, such as at the user level, OneWorld ignores any security set at lower levels, such as at the group or \*PUBLIC levels. If you set security at a higher level, you must ensure that you are very complete with the setup.

**Note:** Before you can set up row security, you must turn on row security in Data Dictionary Design. The first steps in this task describe this process.

### To set up row security

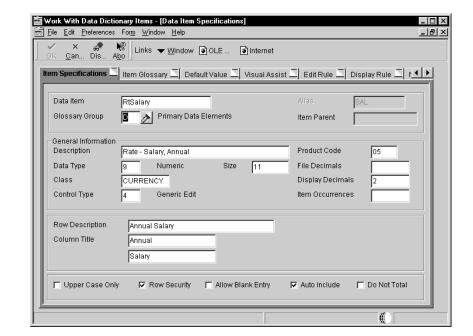
1. On the Data Dictionary Design menu (GH951), choose Work with Data Dictionary Items (P92001).

The Work With Data Items form appears.



2. Click Find, choose a data item that you want to secure and click Select.

**Note:** You can enter search criteria in the Search Description field and the QBE row to narrow your search.



The Data Item Specifications form appears.

3. Click the Row Security option and click OK.

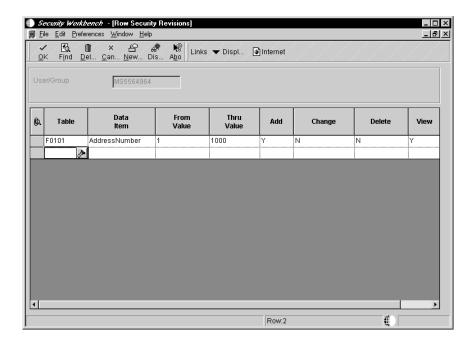
This option must be turned on for row security to work.

4. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

5. From the Form menu, choose Set Up Security, and then choose Row.

The Row Security Revisions form appears.



- Complete the following field, and click Find to display current row security:
  - User/Group
- 7. Complete the following fields, either in the first open detail area row (to add security) or in a pre-existing detail area row (to change security):
  - Table

You can enter \*ALL in this field.

• Data Item

This field is required.

From Value

This field is required.

- Thru Value
- Add
- Change
- Delete
- View
- 8. Click OK to save your security information.

# To delete security on the Row Security Revisions form

- 1. On the Row Security Revisions form, complete the following field and click Find:
  - User/Group

**Note:** If you accessed the Row Security Revisions form from the Work with User/Group Security form for a specific record, the user or group associated with the security record appears in the User/Group field by default.

- 2. Choose the security record or records in the detail area, and then click Delete.
- 3. On Confirm Delete, click OK.
- 4. Click OK when you finish deleting row security.

If you do not click OK after you delete the row security records, OneWorld does not save the deletion.

# **Setting Up Column Security**

This task explains how to add and revise column security. You can secure users from viewing a particular field or changing the value for a particular field. This can be a database field or a field that is defined in the data dictionary but is not in the database.

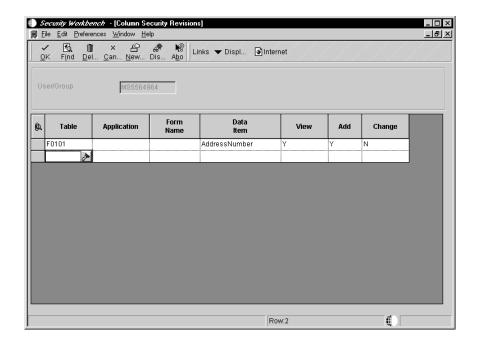
# To set up column security

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security, and then choose Column.

The Column Security Revisions form appears.



- 3. Complete the following field, and click Find to display current column security:
  - User/Group
- 4. To add new security, in the last row on the detail area enter information into only *one* of the following fields:
  - Table
  - Application
  - Form Name

You can enter \*ALL in any of these fields; however, after \*ALL is entered for a table, application, or form for a specific data item, you cannot enter \*ALL again for that data item.

- 5. Complete the following fields.
  - Data Item
  - View
  - Add
  - Change
- 6. To change security, change the row values in the detail area.
- 7. Click OK to save your security information.

### To delete security on the Column Security Revisions form

- 1. On the Column Security Revisions form, complete the following field, and then click Find:
  - User/Group

**Note:** If you accessed the Column Security Revisions form from the Work with User/Group Security for a specific record, the user or group associated with the security record appears in the User/Group field by default.

- 2. Highlight the security record or records in the detail area and click Delete.
- 3. On Confirm Delete, click OK.
- 4. Click OK when you finish deleting column security.

If you do not click OK after you delete the security records, OneWorld does not save the deletion.

## **Setting Up Processing Option Security**

This task explains how to add, revise, and remove processing option security. You can secure users from changing, prompting for values, and prompting for versions of specific processing options. By itself, setting security that prohibits users from prompting for versions will not prevent them from changing values in the processing option. If you do not want users processing option values at all, you may want to set security so that users are secured from the prompt for value and prompt for versions.

This task also explains how to add a \*ALL object and how to move all of the applications for a particular user or group from unsecured to secured.

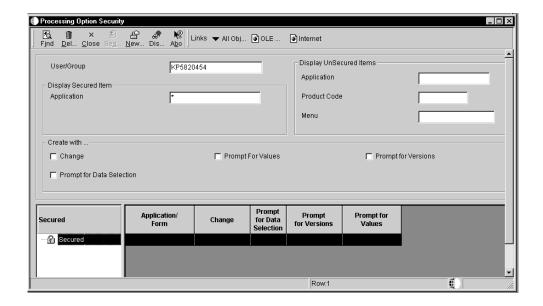
### To set up processing option security

1. On the Security Maintenance (GH9052) menu, choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security, then Processing Option.

The Processing Option Security form appears.



- 3. Complete the following fields and click Find:
  - User/Group

Enter a complete user or group ID, which includes \*PUBLIC but not wildcards.

Application

Enter an application name, such as P0101. You can also enter \*ALL to display all applications.

Current security settings for that user or group appear under the Secured node in the tree. Expand the node to view the individual secured applications. After expanding the node, the applications that are secured also appear in the detail area.

- 4. Complete *one* of the following fields that appear under the Display UnSecured Items heading, and click Find:
  - Application
  - Product Code
  - Menu

You must perform this step before you can add new security. This step provides a list of applications from which to choose.

Your search (application, product code, or menu) appears under the UnSecured node. Expand the node to view applications (interactive and batch) and/or menus with interactive or batch applications. After expanding the node, the applications also appear in the detail area.

For example, to set security on applications within the 00 product code, you would enter 00 in the Product Code field and click Find. All of the applications (interactive and batch) attached to product code 00 appear after you expand the UnSecured node.

- 5. Perform the following actions as necessary to add, change, or remove processing option security:
  - Add security to processing options
  - Change security for processing options
  - Remove security from processing options

### To add security to processing options

Under the Create With heading, click one or more of the following options, and then drag applications from the UnSecured node to the Secured node:

- Change
- Prompt for Values

When you click this option, you automatically activate the Change option.

- Prompt for Versions
- Prompt for Data Selection

Then do one of the following:

- Drag applications from the UnSecured node to the Secured node.
- From the Row menu, choose All Objects to move all applications to the Secured node.
- From the Row menu, choose Secure to All to move all objects beneath the UnSecured node to the Secured node.

The applications now appear under the Secured node with the appropriate security.

For example, to set prompt-for-values security, which also automatically sets change security, click the Prompt for Values option. Next, drag one application at a time from the UnSecured node to the Secured node. The detail area reflects the prompt-for-values and change security that you set for these applications. This means that the user that you entered cannot prompt for values or change processing options on any applications that you dragged to the Secured node.

## To change security for processing options

Under the Secured node, choose an application, click one or more of the following options, and then from the Row menu, choose Revise Security:

- Change
- Prompt for Values

When you click this option, you automatically activate the Change option.

- Prompt for Versions
- Prompt for Data Selection

The values under the Change, Prompt for Values, and Prompt for Versions fields in the detail area change accordingly.

### To remove security from processing options

Do one of the following:

- Under the Secured node, choose an application and click Delete.
- Under the Secured node, drag an application from the Secured node to the UnSecured node.
- On the Row menu, choose Remove All. This moves *all* applications from the Secured node to the UnSecured node.

## **Setting Up Tab Security**

This task describes how to add, change, and remove security for forms as tabs. You can secure users from changing the name of the tab and viewing the form that you call by using the tab.

**Note:** If you secure a user from an application, you cannot also secure the user from certain tabs on a form in that application. This restriction prevents redundant "double" security. Similarly, if you secure a user from a tab, you cannot secure the user from the application that contains the tab.

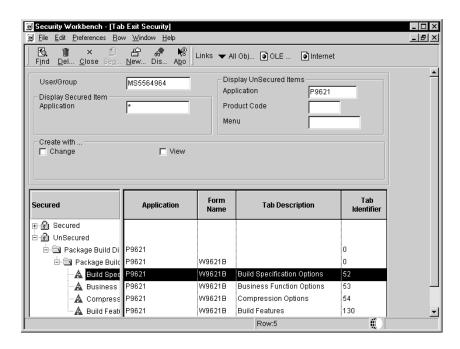
### To set up tab security

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security and then choose Tab Security.

The Tab Exit Security form appears.



- 3. Complete the following fields and click Find:
  - User/Group

Enter a complete user or group ID, which includes \*PUBLIC, but not wildcards.

Application

You can view security for a specific application, or enter \*ALL to display all applications.

Current security settings for that user or group appear under the Secured node in the tree. Expand the nodes to view the secured tabs. After expanding the node, the secured tabs also appear in the grid.

- 4. Complete *one* of the following fields that appear in the Display UnSecured Items heading and click Find:
  - Application

You can use \*ALL in this field to select all OneWorld objects.

In the detail area, this special object appears as \*ALL and displays the security that you defined for the object, such as Run Security or

Install Security. The \*ALL object acts as any other object, and you can use the Revise Security and Remove All options from the Row menu.

- Product Code
- Menu

You must perform this step before you can add new security. This step provides a list of applications from which to choose.

Your search (application, product code, or menu) appears under the UnSecured node. Expand the nodes to view applications (interactive and batch) and the associated tabs. After expanding the node, the applications or tabs also appear in the detail area.

For example, to set security for tabs in applications within the 00 product code, you would enter 00 in the Product Code field and click Find. All of the applications (interactive and batch) attached to product code 00 appear after you expand the UnSecured node.

- 5. Perform the following actions as necessary to add, change, or remove tab security:
  - Add security to a tab
  - Change security for a tab
  - Remove security from a tab

## To add security to a tab

Under the Create With heading, click one or more of the following options, and then drag tabs from the UnSecured node to the Secured node:

Change

Click this option to prohibit a user or group from changing information on that tab page.

View

Click this option to hide the tab from the user or the group.

The hyper-button exit that you dragged appears under the Secured node.

For example, to set up change security, click the Change option. Next, drag tabs one at a time from the Unsecured node to the Secured node. The detail area reflects the change security that you set for the tabs. This

security means that the user that you entered cannot change the tabs that you dragged to the Secured node.

## To change security for a tab

Under the Secured node, choose a tab, click one or more of the following options, and then from the Row menu, choose Revise Security:

Change

Click this option to prohibit a user or group from changing the name of the tab.

View

Click this option to hide the tab from the user or the group.

The values under the Change and View fields in the detail area change accordingly.

## To remove security from a tab

Do one of the following:

- Under the Secured node, choose a tab, and click Delete.
- Under the Secured node, drag a tab from the Secured node to the UnSecured node.
- On the Row menu, choose Remove All. This moves *all* tabs from the Secured node to the UnSecured node.

## **Setting Up Exit Security**

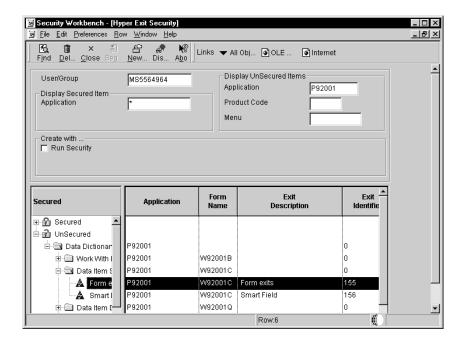
This task describes how to add, change, and remove security for the menu bar exits on OneWorld forms. These exits call applications and allow users to manipulate data. Exit security also provides restrictions for the hyper-button.

## To set up exit security

1. On the Security Maintenance (GH9052) menu, choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security, and then choose Exit Security.



- 3. Complete the following fields and click Find:
  - User/Group

Enter a complete user or group ID, which includes \*PUBLIC, but not wildcards.

Application

View security for a specific application. You can also use \*ALL to display all applications.

Current security settings for that user or group appear under the Secured node in the tree. Expand the node to view the individual secured applications, such as interactive and batch. After expanding the nodes, the secured hyper-button exits also appear in the detail area.

- 4. Complete *one* of the following fields that appear in the Display UnSecured Items heading, and click Find:
  - Application

You can enter \*ALL in this field.

- Product Code
- Menu

You must perform this step before you can add new security. This step provides a list of applications from which to choose.

Your search (application, product code, or menu) appears under the UnSecured node. Expand the nodes to view applications (interactive and batch) and hyper-button exits. After expanding the nodes, the hyper-button exits also appear in the detail area.

For example, to set security on hyper-buttons in applications within the 00 product code, you would enter 00 in the Product Code field and click Find. All of the applications (interactive and batch) attached to product code 00 appear after you expand the UnSecured node.

- 5. Perform the following actions as necessary to add, change, or remove exit security:
  - Add security to an exit
  - Change security for an exit
  - Remove security from an exit

## To add security to an exit

Under the Create With heading, click the following option, and then drag exits from the UnSecured node to the Secured node:

• Run Security

The exits that you dragged appear under the Secured node.

For example, to set Run Security, click the Run Security option. Next, drag exits one at a time from the UnSecured node to the Secured node. The grid reflects the security that you set for these exits. This security means that the user that you entered cannot use the exit.

## To change security for an exit

Under the Secured node, choose an exit, click the following option, and then from the Row menu, choose Revise Security:

Run Security

The values under the Run field in the detail change accordingly.



## To remove security from an exit

Do one of the following:

- Under the Secured node, choose an exit, and click Delete.
- Under the Secured node, drag an exit from the Secured node to the UnSecured node.
- On the Row menu, choose Remove All. This moves *all* exits from the Secured node to the UnSecured node.

# **Setting Up Exclusive Application Security**

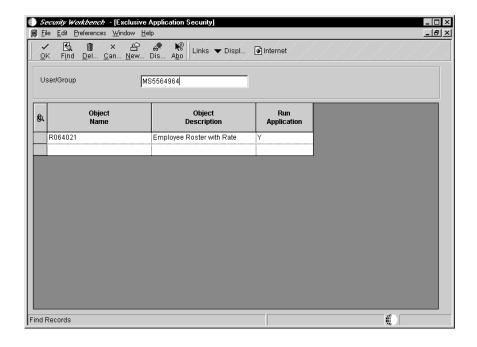
This task describes how to grant access to otherwise secured information through one exclusive application. For example, assume that you use row security to secure a user from seeing salary information, but the user needs to run a report for payroll that includes salary information. You can grant access to the report, including the salary information, using exclusive application security. OneWorld still secures the user from all other instances where salary information would appear.

### To add access with exclusive application security

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group security form appears.

2. From the Form menu, choose Set Up Security, and then choose Exclusive Application.



- 3. Complete the following field:
  - User Group

Enter a complete user or group ID, which includes \*PUBLIC, but not wildcards.

- 4. Complete the following fields in the detail area:
  - Object Name

Enter the name of the exclusive application for which you want to allow access (the security). For example, to change the security for a user of the Vocabulary Overrides application, enter P9220 in this field.

- Run Application
- 5. Click OK to save the information.

## To delete access on the Exclusive Application Security form

- 1. On the Exclusive Application Security form, complete the following field and click Find:
  - User/Group

**Note:** If you accessed the Exclusive Application Security form from the Work with User/Group Security for a specific record, the user or group associated with the security record appears in the User/Group field by default.

- 2. Highlight the security records in the grid and click Delete.
- 3. On Confirm Delete, click OK.
- 4. Click OK when you finish deleting exclusive application security.

If you do not click OK after you delete the security records, OneWorld does not save the deletion.

## **Setting Up External Calls Security**

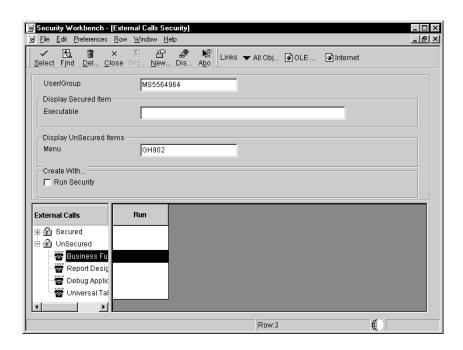
This task describes how to secure users and groups from access to external call applications. In OneWorld, certain applications exist that are not internal to OneWorld; they are stand-alone executables. For example, the Report Design Tool, which resides on menu GH902, is a stand-alone application. You can also call this application externally using the RDA.exe. By default, this file resides in the \B7\SYSTEM\Bin32 directory.

### To set up security for external calls

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, choose Set Up Security, and then choose External Calls.



- 3. Complete the following fields, and click Find:
  - User/Group

Enter a complete user or group ID, which includes \*PUBLIC, but not wildcards.

Path

Enter the name of the external application, such as debugger.exe. When you enter information into this field, OneWorld searches only for the indicated application.

Menu

Enter the name of a menu, such as GH902, to list the external applications that reside on that menu.

Current security settings for that user or group appear under the Secured node in the tree. Expand the node to view the individual secured applications, such as debugger.exe.

4. Perform the following actions as necessary to add, change, or remove security for external calls:

### Add security to an application

Under the Create With heading, click the following option:

Run Security

Then do one of the following:

- Drag applications from the UnSecured node to the Secured node.
- From the Row menu, choose All Objects to move all applications to the Secured node.
- From the Row menu, choose Secure to All to move all objects beneath the UnSecured node to the Secured node.

The external call applications now appear under the Secured node with the appropriate security.

For example, to set run security on the Business Function Design application, turn on the Run Security option, and then drag the Business Function Design node from the UnSecured node to the Secured node. The detail area reflects the run security that you set for this application. This would mean that the user that you entered could *not* run the Business Function Design application.

### Change security for an application

Under the Secured node, choose an application, click the following option, and then from the Row menu, choose Revise Security:

• Run Security

The values under the Run field in the detail area change accordingly.

### Remove security from an application

Do one of the following:

- Under the Secured node, choose an application, and click Delete.
- Under the Secured node, drag an application from the Secured node to the UnSecured node.
- On the Row menu, choose Remove All. This moves *all* applications from the Secured node to the UnSecured node.

## Copying Security for a User or a Group

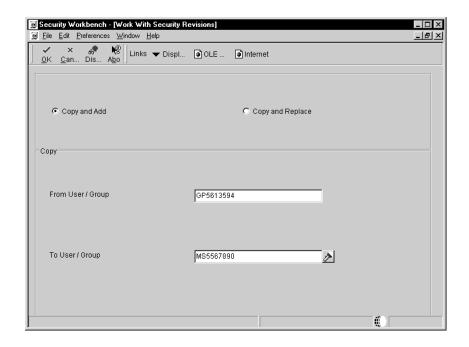
You can copy the security information for one user or group and use this information for another user or group. When you copy security, you can either overwrite the current security for the user or group, or you can add the new security information to the existing security information. You can also copy all of the security records for a user or group, or you can copy one security record at a time for a user or group.

## To copy all security records for a user or a group

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work With User/Group Security form appears.

2. From the form menu, choose Copy Security.



- 3. Click one of the following options:
  - Copy and Add

When you copy and add security settings, you do not overwrite pre-existing security for user or group.

• Copy and Replace

When you copy and replace security settings, OneWorld deletes the security information for a user or group, and then copies the new security information from the selected user or group.

- 4. Complete the following fields and click OK:
  - From User / Group
  - To User / Group

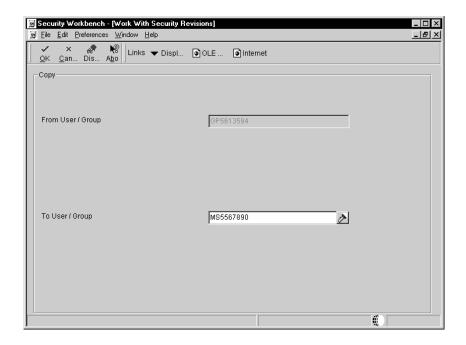
OneWorld saves the security information and returns you to the Work with User/Group Security form.

## To copy a single security record for a user or a group

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work With User/Group Security form appears.

2. Highlight the security record row that you want to copy, and then from the toolbar, click Copy.



- 3. Complete the following field and click OK:
  - To User / Group

OneWorld saves the security information and returns you to the Work with User/Group Security form.

# Deleting Security on the Work with User/Group Security Form

In addition to deleting security records on the forms specific to the security type, such as application, row, or external calls, you can delete security records on the Work with User/Group Security form.

# To delete security on the Work with User/Group Security form

1. On the Work with User/Group Security form, click Find, choose a record in the grid, and then click Delete.

**Note:** You can enter search criteria in the QBE row to narrow your search.

2. On Confirm Delete, click OK.

Security Workbench deletes the security record and refreshes the grid.

# **Understanding Signon Security**

OneWorld security runs on a logic server in a dedicated internal process. You create a security table on your data server that stores information, such as:

Value	Description
OneWorld User	The user ID used to sign on to OneWorld.
OneWorld Password	The user's password that OneWorld validates when signing on to OneWorld.
System User and System Password	The system user and password is the actual user and password that is used to connect to all database management systems (DBMS). If the OneWorld environment includes more than one DBMS, you can create different system users and passwords for each data source.
Change Frequency	The frequency of password changes required by OneWorld.
Last Change	The date that the OneWorld password was last changed.

You must define a security record for each OneWorld user either by group or individual. J.D. Edwards recommends that you map multiple OneWorld users to the same system user. For example, each user can use the same system user that OneWorld uses to connect to OneWorld database management systems. By setting up your security in this manner, you can simplify database administration of users and passwords.

You can also set up unified logon with OneWorld to simplify signon security. When you set up unified logon for OneWorld, OneWorld uses Windows NT Authentication to verify OneWorld security. This verification allows OneWorld signon security to use the network signon information that a user supplies when signing on to Windows; OneWorld does not require the user to enter another user ID and password when signing on to OneWorld.

This chapt	er discusses	the following	signon	security	issues:
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Password encryption
Security setup
Process flow for OneWorld security signon
Signon security for web users

## **Security Table Access**

Provided that you keep the system user and password secure, no users have direct access to the OneWorld Security table (F98OWSEC). The exception to this is for OneWorld system administrators who maintain the security information. The OneWorld security server has access to the OneWorld Security table (F98OWSEC) through JDENet.

You must perform all validation and changes of OneWorld passwords through a JDENet message to the enterprise server with the security table. Upon validating a OneWorld password, the JdeNet message returns the system user and password that you enter. These are encrypted across the network. Internally, all connections to databases are done using this system password.

Using your database management system, you should place database security on the OneWorld Security table (F98OWSEC). You should also assign OneWorld object security to P98OWSEC so that users cannot access the object except to enter User Password Revisions (W98OWSECD). See *Setting Up User Security*.

J.D. Edwards recommends that you do not replicate the Security table (F98OWSEC) to the workstations.

## **Password Encryption**

You can enter the initial OneWorld signon password for each user in a number of ways, such as:

- Manually typing it in
- Using a default password established through the signon security processing options
- Having OneWorld enter it automatically because the user already has an existing security record

When manually entering a password, or when using the processing option default password, you will be able to see the password for a new user because you are typing it in. But when you revise this record at another time, OneWorld will have encrypted the password and all you will see are asterisks (\*\*\*). The number of asterisks does not represent the number of characters in the

password. The user security application does not "know" what the password is. The application is given a flag that indicates that a password has been entered. OneWorld stores the actual password on the security server in the OneWorld Security Table (F98OWSEC) within a binary object. OneWorld accesses the binary object when the user security application requests a change or inquiry.

## **Security Setup**

The following is a checklist that presents an overview of the steps required to set up security:

• Ensure that the Security table (F98OWSEC) is located on your enterprise server in the system data source and that the table is mapped to the correct data source through the Object Configuration Manager.

If your system data source resides on your enterprise server, the security table should reside in the system data source. However, if your system data source is located on the deployment server (or other servers), the security table should be moved to the server map data source for your enterprise server.

If you have more than one logic server, J.D. Edwards recommends that you use only one as your security server.

- From within your DBMS, place database security on this table to prevent a
  user from accessing the object except to enter passwords through User
  Password Revisions.
- Place security on the logic server's jde.ini file. This is required because the DBMS user ID and password to the OneWorld Sign On Security table are stored in this file.
- Create security records for individual users. This includes assigning the following:
  - Data source
  - System user
  - System password
  - OneWorld password
  - User Status
  - Allowed number of invalid signon attempts (optional)
  - Change frequency (optional)

**Note:** If you intend to use unified logon, every user in the OneWorld security database requires a unique user ID.

 Verify and modify the jde.ini file on your OneWorld logic server for your platform environment. If you use unified logon, you need to change the settings for unified logon in the [SECURITY] section in addition to the normal OneWorld [SECURITY] settings.

• If you use unified logon with your OneWorld security, set up a unified logon server for each instance of OneWorld on each server. For example, if you have an NT server with multiple releases of OneWorld, you need a unified logon server for each release on the server.

The unified logon server differentiates between instances of OneWorld, based on the port numbers for these instances. For example, if the port number for OneWorld is 6104, the port number for the associated unified logon server is also 6104. Other instances and unified logon servers use different port numbers.

- Verify and modify the jde.ini file that will be deployed to your server's workstation installations.
- Require signon security for all machines.

## Process Flow for OneWorld Sign On Security

OneWorld provides sign on security with an architecture designed to provide user security for OneWorld and the logically attached database management systems. The security architecture prevents you from viewing your database or system password and therefore having the ability to bypass OneWorld applications to view and change data.

The following text explains the process flow for standard sign-on security:

 Oneworld workstations sign on to OneWorld using their OneWorld user ID and password. These workstations can be networked or stand-alone workstations, laptop computers, or other OneWorld hosts.

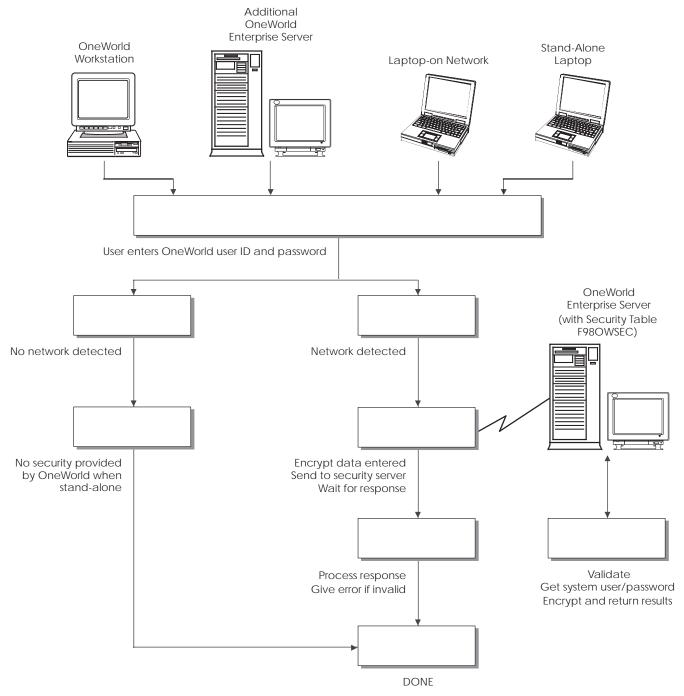
If you enter a valid user ID and password, as validated against the local OneWorld installation, the start-up process continues.

 As OneWorld starts up, it tries to detect an operational network environment.

If a network is not detected, OneWorld allows local operation in a store-and-forward mode. Because the workstation or laptop computer is not connected to a network nor a OneWorld enterprise server, no validation can be performed against the security table. Therefore, security is limited to that provided by the local workstation or laptop installation.

If a network is detected, OneWorld encrypts the password information and sends it over the network to the OneWorld enterprise server. The enterprise server checks the incoming validation request against a table of valid users and passwords. If the user ID and password information are valid, OneWorld accepts the signon values and returns the system ID and password to the logically attached database servers. This information is also encrypted on the enterprise server prior to broadcast on the network.

The following graphic shows a process flow model for standard OneWorld signon security:



The following text explains the process flow for sign-on security with a unified logon:

• A user starts up OneWorld on a workstation.

 OneWorld verifies that the unified logon is active, and then sends an authentication request to the unified logon server, based on the domain user ID.

**Note:** The unified logon server is not a physical server, but rather a device that verifies signon security against the domain signon security maintained by Windows NT.

During jdesnet initialization, jdesnet activates the unified logon server thread. The unified logon server ends automatically when jdesnet ends.

- The unified logon server searches its user list for an entry that matches the domain user ID. When the server finds a match, the server sends a validation request to the OneWorld enterprise server.
- The OneWorld enterprise server verifies that the response from the unified logon server matches the security information in the Security Table (F98OWSEC).
- If the security information from the user list on the unified logon server matches the security information in F98OWSEC on the enterprise server, the start-up process continues.
- The first time that a user signs on to OneWorld with the unified logon, the Environment Selection appears. The user must enter an environment in the Environment field. Click the checkbox to set the environment as the default and avoid the Environment Selection form on subsequent signon attempts.

**Note:** The ShowUnifiedLogon setting in the [SECURITY] section of the jde.ini file allows users to reset whether the Environment Selection form appears at signon. This feature allows users to change the environment later. The following example describes the jde.ini file setting:

[SECURITY]
ShowUnifiedLogon=0 or 1

Value	Description
0	A value of 0 for ShowUnifiedLogon disables the Environment Selection form. When you click the checkbox on the Environment Selection form to set a default environment, you set this value to 0.
1	A value of 1 for ShowUnifiedLogon enables the Environment Selection form. When a user signs on to OneWorld, the Environment Selection form appears and allows the user to choose an environment. This is the default setting for ShowUnifiedLogon.

OneWorld Xe (09/00) 10–47

Additional OneWorld **Enterprise Server** OneWorld Workstation Laptop on Network Standalone Laptop The workstation requests validation that the user exists in the user list on the unified logon server The unified logon server No responds to the OneWorld validation request If the unified logon Yes cannot validate the request, the The workstation sends the attempt to sign on verified signon information to the will fail OneWorld security server. The OneWorld and Windows NT user IDs need to be identical OneWorld and Enterprise Server (with Security Table F98OWSEC) OneWorld verifies that the No user ID from the unified logon server matches the user ID in F98OWSEC If the OneWorld Yes security server cannot verify the user ID, the attempt to sign on will fail

The following illustration shows the process flow for unified logon:

OneWorld starts

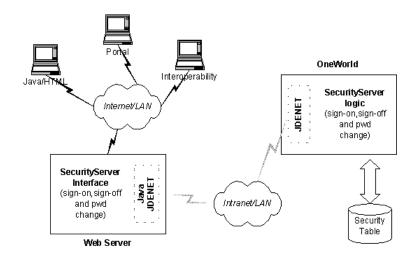
## Signon Security for Web Users

Java/HTML, Portal, and Interoperability users who sign on to OneWorld across the internet to the JAS security server are authenticated by the OneWorld security server and the F98OWSEC table. The JAS security server acts as an interface between the web user's client workstation and the OneWorld security server.

When web users sign on, sign off, or make a password change, the JAS server sends the request via a JDENET message to the OneWorld security server, which in turn accesses the F980WSEC table. The OneWorld security server then returns the authentication via a JDENET message to the JAS security server. If the user is authenticated, the security info is cached to the JAS security server.

In sum, the JAS security server acts as a middleman between the Java/HTML, Portal, and Interoperability client and the OneWorld security server.

The following graphic shows a process flow model for OneWorld signon security with unified logon for web users:



As the security middleman, the JAS security server handles the following tasks:

- Connects to the OneWorld security server for user security authentication and password when a web user signs on.
- Fails over to a secondary OneWorld security server when the primary server is down, provided that the proper jas.ini settings have been defined.
- Notifies Java/HTML, Portal, and Interoperability client workstations when a user password has expired. If an Interoperability user's password has expired, signon simply fails without notification of the cause.
- Sends error message to user log after web user has attempted unsuccessfully times to sign on *x* number of times to OneWorld, where *x* is the number of signon attempts defined in the F98OWSEC table.

- Allows Java/HTML and Portal users to change name and password.
- Encrypts JDENET messages sent between the JAS security server and the OneWorld security server.
- Keeps a valid user session open until the user signs off or the OneWorld session expires.

To the OneWorld web user, signon and signoff look the same as they would to a OneWorld user on a Windows NT, UNIX, or AS/400 platform.

To set up security for web users through the OneWorld security server, you add the following parameters to those already existing in the jas.ini file:

[SECURITY] parameter in jas.ini file	Parameter value
NumServers	The total number of OneWorld security servers available to web users signing on to the system. If this parameter is missing, the default value is 1, and the signon is handled by the primary security server.
SecurityServer	The name of the primary security server.
SecurityServerN	The name of the secondary security server. The value of N is 1 for the first secondary server, 2 for the second, and so on. Assign values to this parameter if you want signon to failover to a secondary server if users cannot sign on to the primary server.
UserLogonCookie=	If the value is TRUE, the user can save signon information (username, password, and environment) in an encrypted cookie on the workstation and will not have to type the information in at the next signon. If the value is FALSE, the feature is disabled.
#CookieLifeTime unit	The unit of time used to measure a cookie's lifetime. For example, the parameter value "day" means that the cookie's lifetime will be measured in days.
Cookie LifeTime	The amount of time before a cookie expires. The unit of measure is defined by the #CookieLifeTime unit parameter value. If that value is "day," and the value of the Cookie LifeTime parameter is 7, the cookie will expire in seven days.

If you define one primary server and two secondary servers, your jas.ini file [SECURITY] settings would look like the following example:

[SECURITY]
NumServers=3
SecurityServer=JDED
SecurityServer1=JDEC
SecurityServer2=corowhp2
UserLogonCookie=TRUE
#CookieLifeTime unit is "day"
CookieLifeTime=7

## SecurityServer=JDED

If you define one or more secondary servers, signon fails over to the secondary server if the primary server is down. If both the primary OneWorld security server and a secondary server as defined in the jas.ini file fail, the JAS server fails the user signon.

If you do not define a server number or any secondary servers, your jas.ini [SECURITY] settings would look like the following example:

[SECURITY]
SecurityServer=JDED
UseLogonCookie=TRUE
CookieLifeTime unit is "day"
CookieLifeTime=7

For a full discussion of the jas.ini file, see *Understanding Java Server jas.ini Settings*.

# **Working with User Security**

Use the User Security (P98OWSEC) application to create, test, and change user security for OneWorld and the logically attached database management systems. The security architecture prevents you from viewing your database or system password and therefore having the ability to bypass OneWorld applications to view and change data. J.D. Edwards uses an encryption algorithm to ensure that applications other than OneWorld security cannot access passwords transmitted across the OneWorld network.

You can also set up a unified logon server for a OneWorld server. The unified logon server enables OneWorld to use the domain logon information to determine user security for OneWorld; in a OneWorld unified logon scenario, a user only needs to enter a user ID and a password at network logon.

This chapter contains the following:

Creating and revising user security
Adding and revising data sources for user security
Changing the jde.ini file for user security
Running a security analyzer report
Setting up unified logon

## **Creating and Revising User Security**

You can create security records one at a time for each of your users, you can set security for a group of users, or you can set security for all users. You should use this feature to set up user security initially. The User Security application provides a copy function to simplify the creation of security records for individual users.

**Note:** J.D. Edwards recommends that you create a "model" user with security information that you can copy to create other OneWorld users. Typically, users within a specific group use similar security information.

You should keep user security simple. Managing OneWorld user IDs and system (database) user IDs can become complicated quickly. The simplest way to set up user security is to have all OneWorld data sources share the same system user ID and password by leaving the data source field blank when you initially create user security records for users or groups on the Security Revisions form. When you leave the data source field blank, OneWorld automatically enters DEFAULT in the field. The DEFAULT data source allows you to create one security record for all users. Each time that a user accesses a table through a OneWorld application, OneWorld searches for a security record for that user and that specific data source where the table resides. If OneWorld does not find a specific record, then OneWorld uses the default data source, which would be the security record that you created with the DEFAULT data source field.

Although you should try to maintain as few system user IDs as you can, occasions will arise that require you to set up database security in addition to the OneWorld object and user security for specific users and specific tables. For example, you might need to create system users with additional authority to what the normal system user needs.

## Before You Begin

Create user profiles. See *User Profiles*.

Complete the following tasks:

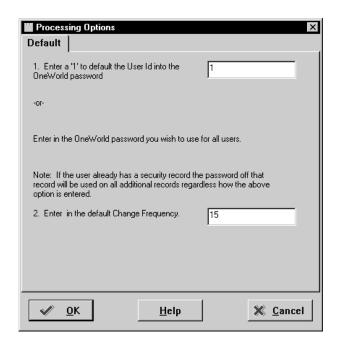
- Set processing options for user security
- Create user security
- Copy user security
- Revise user and group security
- Delete user security
- Revise all user security
- Change a signon password (administrators only)

Perform this task to reset forgotten passwords for users.

- Review security history
- Require user security

## To set processing options for user security

The User Security (P98OWSEC) application has the following processing options that you can use to set a default password when creating user security for users or groups, and to set a default change frequency for the password:



- Option 1: Enter one of the following:
  - "1" to use the User ID as the password when creating user security
  - Enter a password that you want to use as the default for all users when you create user security

For all existing user security records, the passwords remain as they are, and any new passwords needed will reflect their current password rather than the password entered into the processing option.

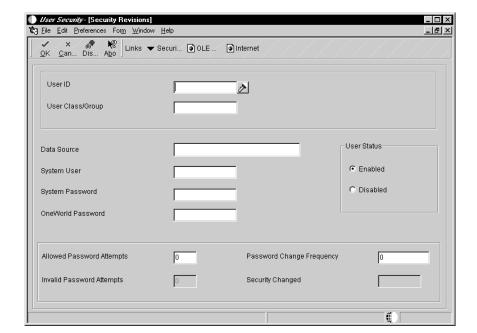
• Option 2: Enter a default (in days) for how often users need to change their user passwords.

# To create user security

Before you can create user security, you must first set up all user and group records in the Address Book Revisions (P01012) application, create a user profile in the User Profiles (P0092) application, and attach the proper Address Book record to the user or group profile. You should also review and set the appropriate processing options before using the User Security (P98OWSEC) application for the first time. See *To Set Processing Options for Signon Security* for more information.

**Note:** J.D. Edwards recommends that you create a "model" user with security information that you can copy to create other OneWorld users. Typically, users within a specific group use similar security information.

1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).



2. On the Work With User Security form, click Add.

- 3. Complete one of the following fields:
  - User ID

If you enter a user ID that already exists, you can modify data source information for the user. OneWorld disables all other fields and options for the user ID.

User Class/Group

If you enter a user class or group that already exists, you will overwrite the security record for the user class or group when you enter information on the form.

**Note:** When you type information in one of these fields, OneWorld disables the other field. For example, if you type GROUP1 in the User Class/Group field, the User ID field becomes gray and unavailable for data entry.

- 4. Complete the following fields:
  - Data Source

If you leave this field blank, you will set security for all data sources. DEFAULT appears in the Data Source field when you tab out of the field. See *Data Sources* in the *CNC Implementation Guide* for more information about data source usage.

System User

- System Password
- OneWorld Password

J.D. Edwards recommends you complete at least the System user and System Password fields.

If you create records by group or for all users at one time, the OneWorld Password field is populated according to the processing option that you choose.

- 5. Under User Status, click one of the following options:
  - Enabled

With User Status enabled, security allows the user to signon to OneWorld. This option is the default setting when you create user security.

Disabled

With User Status disabled, security prohibits the user from signing on to OneWorld.

**Note:** If a user commits a security violation, such as exceeding the maximum number of allowed password attempts, OneWorld automatically sets the value for User Status to Disabled. The system administrator must access the user security record for the user and set User Status to Enabled before the user can sign on to OneWorld. Also, the system administrator can access Administrative Password Revisions to reset the password of the user, which also restores a user profile to the status of enabled.

- 6. If you want to set limits on the OneWorld password for users, complete the following fields:
  - Allowed Password Attempts

Enter the number of invalid password attempts allowed before OneWorld disables access for the user.

Password Change Frequency

Enter the number of days until OneWorld requires the user to change his or her password.

7. Click OK to save the current user security information.

When you create group security, OneWorld creates the user security IDs to the various data sources for all of the users attached to the group with passwords based on processing option 1. Users can now sign on and change their passwords by choosing Change Password from the View User Option menu selection. See *Changing User OneWorld Signon Passwords* for more information.

8. When you finish, click Cancel.

Field	Explanation
User ID	For World, the IBM-defined user profile.
	For OneWorld, the identification code for a user profile.
User Class/Group	A profile used to classify users into groups for security purposes. Some rules for creating a User Class/Group are as follows:  • The 'Class/Group' profile must begin with * so that it does not conflict with any System profiles.  • The 'User Class/Group' field must be blank when entering a new group profile.
All Users	When this box is checked OneWorld security will be added for all User setup in the Library List - User table (F0092) that do not have security currently setup for them in the OneWorld Security table (F98OWSEC).
Data Source	The data source to which the user is secured unless a valid system use rand system password exists in the record. Blank indicates all data sources.
System User	Identifies the actual user that OneWorld will use to connect to the database management systems (DBMS) you have specified as the data source. The system user you define here must exactly match the user value defined in the DBMS.
System Password	Identifies the password that OneWorld will use to connect to the database management systems (DBMS) you have specified as the data source. This password is associated with the System User.
	The system password you define here must exactly match the password value defined in the DBMS. There is no password expiration on the system password; only the OneWorld password.
OneWorld Password	Identifies the user password that OneWorld will use to validate when signing on to OneWorld. This is the only field that end users are allowed to change through User Password Revisions.
	J.D. Edwards recommends that when you set up users for the first time, you set their OneWorld password to a value equal to their OneWorld User ID.
Allowed Password Attempts	The number of signon attempts a user can make before that user profile is disabled.

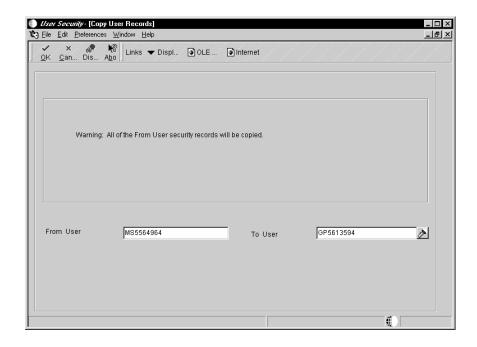
Field	Explanation
Change Frequency	Identifies the number of days before OneWorld requires that a user change their OneWorld password.

## To copy user security

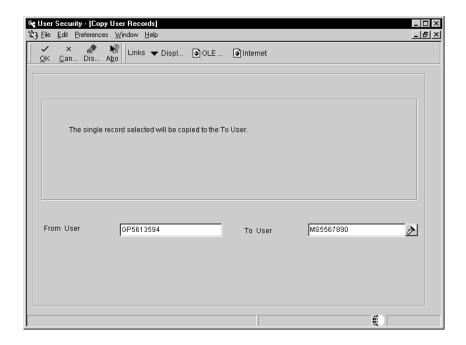
**Note:** J.D. Edwards recommends that you create a "model" user with security information that you can copy to create other OneWorld users. Typically, users within a specific group use similar security information.

A user profile must already exist for a user before you can create user security records for the user. Also, when you copy security records to a user, security records must not already exist for the user. If you try to copy user security to a user with existing user security records, you will receive an error message.

- 1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).
- 2. On the Work With User Security form, find the user, and then complete one of the following:
  - To copy all user security records for a user or group, choose the user or group in the tree structure, and click Copy.



• To copy a single user security record for a user or group, choose the security record row in the detail area, and choose Copy Record from the Row menu.



- 3. On the Copy User Records form, complete the following field and click OK:
  - To User

Type a valid user in this field.

## To revise user and group security

- 1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).
- 2. On Work with User Security, complete either of the following:
  - User ID
  - Group
- 3. Choose the appropriate record in the tree structure, and then choose Revise Security from the Row menu.
- 4. On Security Detail Revisions, complete the following fields as necessary:

**Note:** For a group, choose the appropriate option from the Change box to enable each field.

User Status

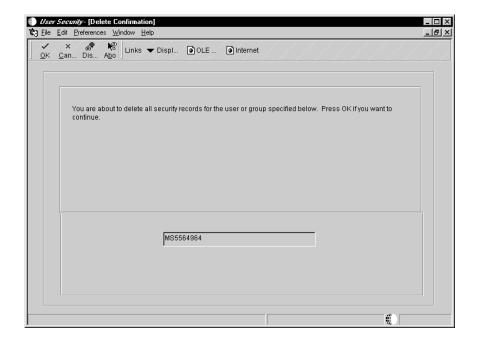
Under User Status, you can enable or disable a user profile.

- Password Change Frequency
- Allowed Password Attempts

### To delete user security

- 1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).
- 2. On the Work with User Security form, find the user or group, choose the appropriate record in the tree structure, and then click Delete.

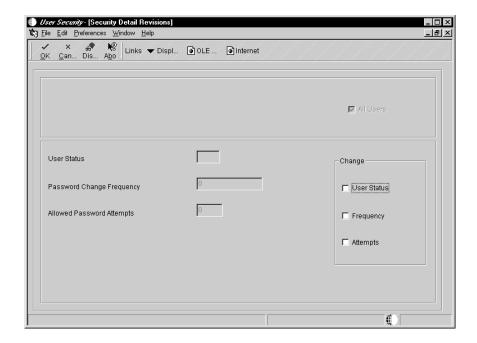
**Note:** If you choose a record from the detail area and click Delete, you will remove the data source for the user, and not remove user security.



3. Click OK to delete all user security records for the user or group.

### To revise all user security

1. On the Work with User Security form, from the Form menu, choose Revise All.



- 2. In the Change box, click any of the following options to enable the related field:
  - User Status
  - Frequency
  - Attempts
- 3. Complete any of the following fields, then click OK:
  - User Status

This field allows you to enable or disable user profiles.

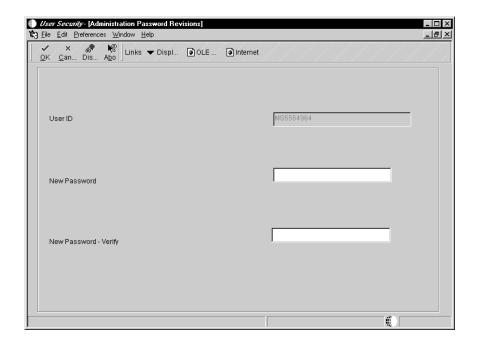
- Password Change Frequency
- Allowed Password Attempts



#### To change a signon password (administrators only)

On the Security Maintenance menu (GH9052), choose Administrative Password Revisions (P98OWSEC).

**Note:** You can also access Administrative Password Revisions from the User Security application. On Work with User Security, find the user, choose the user in the tree structure, and then choose Password Revisions from the Row menu.



On the Administration Password Revisions form, complete the following fields and click OK:

• User ID

The user ID defaults into the field when the user record is highlighted and Password Revision is checked.

New Password

On this form, OneWorld does not restrict your password choices. Any password is valid.

New Password - Verify

Field	Explanation
User ID	Identifies the OneWorld user ID. By default OneWorld populates this field with the value of the currently logged on user.
New Password	Identifies new value for the user password that OneWorld will use to validate when signing on to OneWorld. This value should be different that the Old Password value. The value you specify in this field will become effective the next time you sign on to OneWorld.

OneWorld Xe (09/00) 10–63

Field	Explanation
New Password Verify	Identifies a duplicate of the value you specified in the New Password field. The value you enter here must exactly match the value you enter in the New Password field.

#### See Also

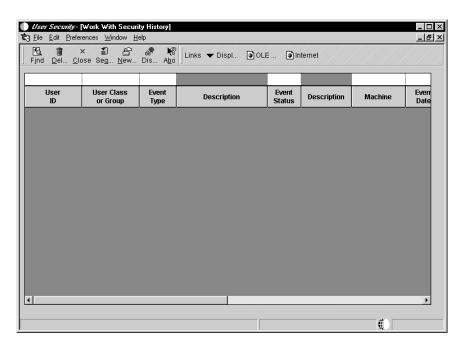
• Changing Your User Options in the OneWorld Foundation guide for details on how to change a password at the end-user level

# To review security history

The [SECURITY] section in your server jde.ini must include the following setting for OneWorld to record security history:

[SECURITY]
History=1

- 1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).
- 2. On Work with User Security, from the Form menu, choose Security History.



3. On Work with Security History, click Find.

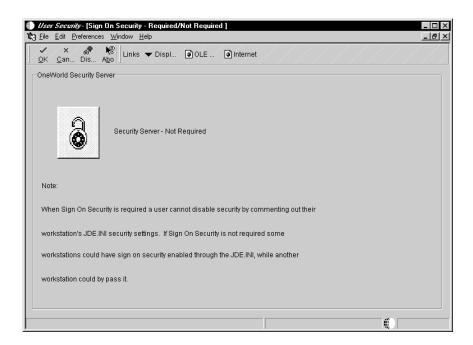
If you know the specific user or group, type the name of the user or group in the appropriate field on the query by example line and press Enter. You can also search for specific information for all users. For example, to see the users who were deleted on a given day, you can search on Event Type 06 (Delete User) and specific Event Date.

4. Review the security history records that appear in the detail area.

#### To require signon security

Use this feature to require all machines to use OneWorld signon security. This procedure only enables mandatory security for the environment that you are signed onto when making this change.

- 1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).
- 2. On the Work with User Security form, choose Req/Not Req from the Form menu.



3. On the Sign On Security - Required/Not Required form, click the lock icon to change the Security Server to "Required" or "Not Required."

**Note:** If you set up your security as Not Required, and have security turned on through the jde.ini file on the enterprise server, users that comment out signon security in their jde.ini files will still not be able to access any data sources without knowing the system user ID and password. When attempting to access a table in a secured data source, users will receive a database password entry form. If system user IDs and

passwords are confidential, no one will be able to access your secured tables.

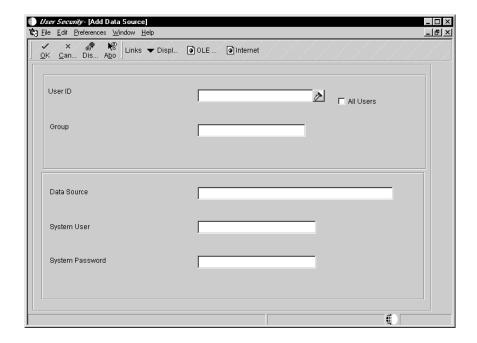
maxNumberOfProcesses=1

# Adding and Revising Data Sources for User Security

Add data sources to user and group records in user security to authorize users and groups to access OneWorld databases. You can revise the system user and system password for existing data sources.

#### To add a data source to a user, a group or all users

- 1. On the Security Maintenance menu (GH9052), choose User Security (P98OWSEC).
- 2. On the Work with User Security form, from the Form menu, choose Add Data Source.



- 3. Complete one of the following fields or options:
  - User ID

Complete this field to add a data source to a specific user.

Group

Complete this field to add a data source to a specific group.

• All Users

Click this option to add a data source to all users.

- 4. Complete the following fields and click OK:
  - Data Source

Leave this field blank to set the data source information for all data sources. When you leave this field blank, OneWorld automatically enters DEFAULT in the field.

- System User
- System Password

# To revise a data source for a user, a group, or all users

- 1. On the Work with User Security form, complete the Data Source field and click Find.
- 2. Choose the appropriate record in the tree structure, and then from the Row menu, choose Revise Data Source.

You can choose a user, a group, or a data source from the tree. If you choose a data source, you will affect all users with any changes you make.

The Data Source Revisions form appears. If you chose a specific user or group, this form displays the user ID or the group name with the data source information. If you chose only the data source, this form displays the All Users option with the data source information.

- 3. Complete the following fields, and click OK:
  - System User
  - System Password

The information that you enter in these fields is necessary to access databases within OneWorld. Depending on what you chose from the tree on Work with User Security, this information will apply to a specific user, a specific group, or all users.



#### To remove a data source for a user, a group, or all users

- 1. On the Work with User Security form, complete the Data Source field and click Find.
- 2. Choose the appropriate record in the tree structure and click Delete.

**Note:** For a user, you can also choose a row in the detail area for the user and click Delete.

The Remove Data Source form appears. If you chose a data source for a specific user or group, this form displays the user ID or the group name with the data source name. If you chose only the data source, this form displays only the data source name.

**Caution:** If you performed your search by data source without including a specific user or group, when you click OK on Remove Data Source, you remove the data source for *all* users.

3. Click OK to remove the data source.

# Changing the jde.ini File for User Security

You must modify the enterprise server and the workstation jde.ini files to enable and synchronize security settings between the enterprise server and the workstation.

**Note:** For OneWorld workstations, enable security by changing settings in the workstation jde.ini file. You should make these changes on the deployment server-resident jde.ini file that will be delivered to the workstation through a package installation.



#### To change the workstation ide.ini file for security

1. Locate the jde.ini file that will be sent to the workstation as part of a package installation. This file is located on the OneWorld deployment server in the release share path:

\\Bxxx\CLIENT\MISC\jde.ini

where xxx is the installed release level of OneWorld. For example, B732 or B733.

2. Using a text editor such as Notepad, view the jde.ini file to ensure the accuracy of the following setting:

```
[SECURITY]
SecurityServer=Enterprise Server Name
DefaultEnvironment=Default Environment
```

See the following table for an explanation of the variable values.

Setting	Value
Security Server	The name of your OneWorld enterprise server. In order for workstations to sign on and run batch reports on the enterprise server, this value must be the same for both the workstation and the enterprise server.
DefaultEnvironment	Identifies any valid environment. If no value is specified here, then security is not enabled for that workstation.

### Setting Auxiliary Security Servers in the Workstation JDE.INI

Within the [SECURITY] section of the workstation jde.ini file, you can set as many as ten auxiliary security servers, as shown:

```
[SECURITY]
NumServers=Numeric Value
SecurityServer=Enterprise Server Name (primary)
SecurityServer2=Enterprise Server Name (auxiliary)
SecurityServer3=Enterprise Server Name (auxiliary)
```

Setting	Value
NumServers	This numeric value is the total number of security servers (primary and auxiliary) that you set under the [SECURITY] section of the jde.ini file. For example, if you set one primary and four auxiliary servers, the NumServers value would be 5. You can set NumServers to any value between one and ten. If you do not include the NumServers setting, OneWorld assumes that you have only one server.

OneWorld Xe (09/00) 10–69

Setting	Value
SecurityServer SecurityServern	The name of a OneWorld enterprise server. Your primary and auxiliary security server names must all corresond to valid enterprise servers. The values must be the same for both the workstation and enterprise servers for workstations to log on to and run batch reports from the enterprise server.
	The variable value $x$ can be a number between 1 and 10. This number defines the auxiliary security server.

#### Changing the Time-Out Value Due to Security Server Communication Error

You might need to change a setting in your workstation jde.ini file if you receive an error such as: Failure to Communicate with Security Server.

Change the following section:

```
[JDENET]
connectTimeout=30
```

#### To change the enterprise server jde.ini file for security

Verify your server jde.ini file settings, as shown in this task. You use these settings to specify OneWorld internal security parameters, valid users and passwords, environments, and data sources. At the end of this task are additional topics concerning the server jde.ini file.

- 1. Locate your enterprise server's jde.ini file.
- 2. Using an ASCII editor such as Notepad, view the jde.ini file to ensure the accuracy of the following settings:

```
[JDENET_KERNEL_DEF4]
dispatchDLLName=name of host dll
dispatchDLLFunction=JDEK_DispatchSecurity
maxNumberOfProcesses=1
beginningMsgTypeRange=551
endingMsgTypeRange=580
newProcessThresholdRequests=0
[SECURITY]
SecurityServer=Enterprise Server Name
User=user ID
Password=user password
ServerPswdFile=TRUE/FALSE
DefaultEnvironment=default environment
```

The following table explains the variable values.

Setting	Value
dispatchDLLName	Valid values for enterprise server host platforms are:
	<ul> <li>HP9000 libjdeknet.sl</li> <li>RS/6000 libjdekrnl.so</li> <li>Windows NT (Intel)         jdekrnl.dll</li> <li>Windows NT (Compaq AlphaServer)         jdekrnl.dll</li> <li>AS/400 JDEKRNL</li> </ul>
	For UNIX platforms, values are case-sensitive.
SecurityServer	The name of your OneWorld enterprise server. This value must be the same for both the workstation and the enterprise server for workstations to run batch reports on the enterprise server.
User	The ID of a user with access to the OneWorld Sign On Security table (F98OWSEC). This is the ID used to connect to the DBMS. Therefore, this value must match that of the target DBMS.
Password	The password for the user ID with access to the OneWorld Sign On Security table (F98OWSEC). This is the password used to connect to the DBMS. Therefore, this value must match that of the target DBMS.

Setting	Value
ServerPswdFile	This parameter is valid for OneWorld servers operating under UNIX operating systems.
	The setting of this parameter determines whether OneWorld uses special password handling for batch reports running on the server. Set the value to TRUE to instruct OneWorld to enable special handling of passwords. Set the value to FALSE to disable special handling.
	When OneWorld runs a batch report on the server, it runs the report using a string of line commands and parameters that includes the user password. Under UNIX operating systems, it is possible to use the ps command to query the status of a job and view the parameters that were used to start the process.
	As a security measure, you can enable special handling by OneWorld. When enabled, OneWorld does not include the user password in the parameter list for a batch process. Instead, it includes the name of a file that contains the user password. This file is deleted as soon as the batch report reads the password.
DefaultEnvironment	The name of a valid environment for accessing the security table. For example, PD7333.

#### Setting Auxiliary Security Servers in the Server JDE.INI

You can set within the [SECURITY] section of the server jde.ini file one to ten auxiliary security servers. You set multiple auxiliary security servers to establish levels of default servers. For example, if a machine cannot access a given security server, the machine tries the next security server defined in the [SECURITY] section. The settings for auxiliary security servers are as follows:

```
[SECURITY]
NumServers=Numeric Value
SecurityServer=Enterprise Server Name (primary)
SecurityServer2=Enterprise Server Name (auxiliary)
SecurityServer3=Enterprise Server Name (auxiliary)
```

Setting	Value
NumServers	This numeric value is the total number of security servers (primary and auxiliary) that you set under the [SECURITY] section of the jde.ini file. For example, if you set one primary and four auxiliary servers, the NumServers value would be 5. You can set NumServers to any value between one and ten. If you do not include the NumServers setting, OneWorld assumes that you have only one server.
SecurityServer SecurityServerx	The name of a OneWorld enterprise server. Your primary and auxiliary security server names must all be valid enterprise servers. The values must be the same for both the workstation and enterprise servers for workstations to log onto and run batch reports from the enterprise server.  The variable value $x$ can be any number between one and ten. This number defines the auxiliary security server.

### Verifying Security Processes in the Server JDE.INI

J.D. Edwards recommends that you define only one process for the security network. You can set multiple processes, but they will likely not be necessary. Under the [JDENET\_KERNEL\_DEF4] section of your server jde.ini file, verify the following:

[JDENET\_KERNEL\_DEF4]
maxNumberOfProcesses=1

# Running a Security Analyzer Report

This process generates two separate reports that provide you with an analysis of OneWorld security. The first report (R98OWSECA) is organized and sorted by data source. A blank data source means that security for the System User ID is applicable to all data sources. The Security Analyzer by Data Source report (R98OWSECA) is based on data that it reads from the OneWorld Security table (F98OWSEC).

The second report (R98OWSECB) is organized by user or group. The Security Analyzer by User or Group report (R98OWSECB) is also based on data that it reads from the OneWorld Security table.

OneWorld Xe (09/00) 10–73

### Running the Security Analyzer by Data Source Report (R98OWSECA)

This report presents security analysis information for each data source, each user ID, and each group. The report is sorted by data source and then by user ID. The following columnar data is displayed:

#### Data Source

Identifies the data source to which the user is secured. Blank indicates all data sources.

- User ID
- User Group

The identification code for a user profile.

#### • System User ID

Identifies the actual user that OneWorld uses to connect to the database management system (DBMS) that you specified as the data source. The system user that is shown here must match the user value defined in the DBMS.

#### Change Frequency

Indicates the number of days before OneWorld requires that a user change their OneWorld password. This can be set by individual user ID or by group.

#### Source Password Changed

Indicates the date that a user's password was last changed.

#### Invalid Sign-Ons

Indicates the number of invalid signon attempts by a user. If the retry count value exceeds the number of allowed attempts, the user profile is disabled.

#### Allowed Attempts

Indicates the number of sign-on attempts that a user can make before that user profile is disabled.

#### User Status

Indicates whether the user can sign on to OneWorld. Valid values are 01 (enabled) and 02 (disabled).

#### Status

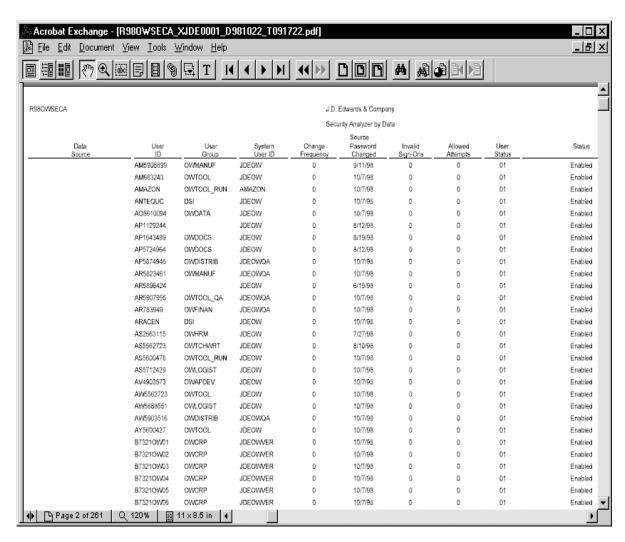
A description code that displays the status of the User Status field.

# To run the Security Analyzer by Data Source Report (R98OWSECA)

- 1. On the Security Maintenance menu (GH9052), choose Security Analyzer by Data Source (R98OWSECA).
- 2. On the Work With Batch Versions form, choose a version, and click Select. The J.D. Edwards default version one (XJDE0001) creates a report for all user IDs for all data sources.
- 3. On the Versions Prompting form, click Submit.

### Example: Security Analyzer by Data Source Report (R98OWSECA)

This example shows an excerpt from the Security Analyzer by Data Source report (R98OWSECA).



### Running the Security Analyzer by User or Group Report (R98OWSECB)

This report presents security analysis information for each user ID, each group, and each data source. The report is sorted either by user ID or user group, as controlled by a processing option. The following columnar data is displayed:

- User ID
- User Group

The identification code for a user profile.

• Change Frequency

Indicates the number of days before OneWorld requires that a user change their OneWorld password. This can be set by individual user ID or by group.

Data Source

Identifies the data source to which the user is secured. A blank indicates all data sources.

System User ID

Identifies the actual user that OneWorld uses to connect to the database management system (DBMS) that you specified as the data source. The system user that is defined here must match the user value defined in the DBMS.

# To run the Security Analyzer by User or Group Report (R98OWSECB)

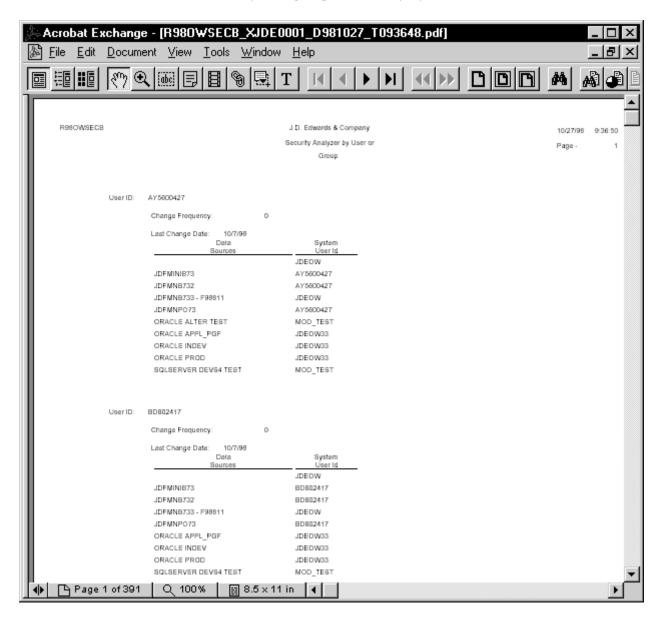
- 1. On the Security Maintenance menu (GH9052), choose Security Analyzer by User or Group (R98OWSECB).
- 2. On the Work With Batch Versions form, choose a version and click Select. The J.D. Edwards default version one (XJDE0001) creates a report for all user IDs for all data sources.

By default, the XJDE0001 version has the processing option for this report set to 1. This option causes the report to be generated by User ID. To generate a report by Group, you can prompt for processing options, and on the User Setup tab, change the value to 2.

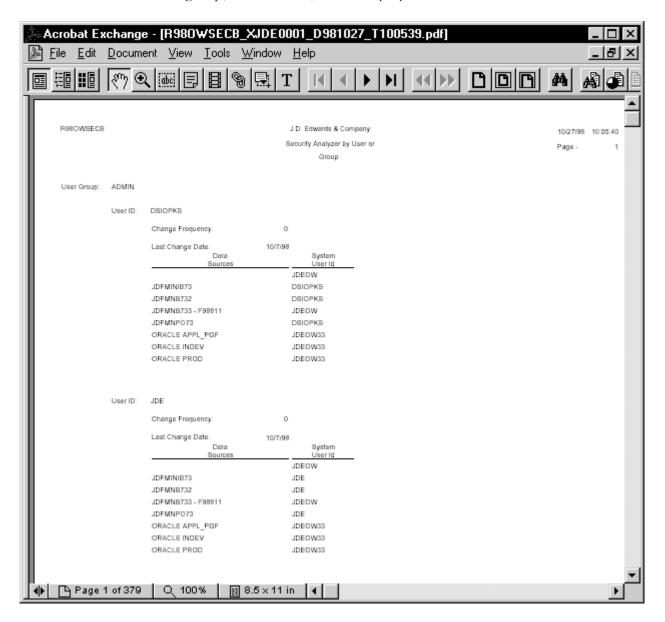
3. On the Versions Prompting form, click Submit.

### Example: Security Analyzer by User or Group Report (R98OWSECA)

The following example shows an excerpt from the report with processing option 1 selected. This option prints the security analyzer report sorted by user ID, then by user group, and finally by data source.



The following example shows an excerpt from the report with processing option 2 selected. This option prints the security analyzer report sorted by user group, then user ID, and finally by data source.



# **Setting Up Unified Logon**

For configurations that use a Windows NT enterprise server, to set up unified logon, you only need to modify the [SECURITY] section of the jde.ini file. When a user signs on, these settings alert OneWorld to use unified logon.

When your enterprise server is on a non-Windows NT platform, you need to set up a Windows NT service for unified logon. This service identifies the unified logon server for OneWorld. You also need to set the unified logon settings in the [SECURITY] section of the jde.ini file.

**Important:** When you use unified logon, you need to use the same user ID for the Windows NT domain and OneWorld so that the records for each are synchronized. For example, if the user ID for a user in the Windows NT domain is USER1, the user ID for OneWorld must also be USER1. If the user IDs are different, unified logon will not work for the user.

#### To modify the jde.ini setting to enable or disable unified logon

- 1. Locate the jde.ini files on the server and on the workstation.
- 2. In the server jde.ini file, add the following settings in the [SECURITY] section:

[SECURITY] SecurityMode=0, 1 or 2

Value	Description
0	A value of 0 for SecurityMode will accept only users set up for standard signon security.
1	A value of 1 for SecurityMode will accept only users set up for unified logon.
2	A value of 2 for SecurityMode will accept users set up for both unified logon and standard signon security.

3. In the workstation jde.ini file, add the following settings in the [SECURITY] section:

[SECURITY]
UnifiedLogon=0 or 1
UnifiedLogonServer=server\_name

# Value Description A value of 0 for UnifiedLogon disables unified logon for the workstation. This setting is the default.

OneWorld Xe (09/00) 10–79

Value	Description
1	A value of 1 for UnifiedLogon sets unified logon for the workstation.
server_name	Enter the name of the server on which the unified logon server data resides.

#### To reset the Environment Selection form

- 1. Locate the jde.ini file on the workstation.
- 2. In the workstation jde.ini file, modify the following setting:

[SECURITY]
ShowUnifiedLogon=0 or 1

Value	Description
0	A value of 0 for ShowUnifiedLogon disables the Environment Selection form. When you click the checkbox on the Environment Selection form to set a default environment, you set this value to 0.
1	A value of 1 for ShowUnifiedLogon enables the Environment Selection form. When a user signs on to OneWorld, the Environment Selection form appears to allow the user to choose an environment. This is the default setting for ShowUnifiedLogon.



#### To setup a service for unified logon

If your enterprise server is not a Windows NT server, J.D. Edwards recommends that you set up services for unified logon on your deployment server. Your deployment server is always a Windows NT server.

1. On your deployment server, in Windows Explorer, go to the \Unified Logon directory and run the file UniLogonSetup.exe.

The Unified Logon Server Setup form appears. On this form, you define the Windows NT service for unified logon servers. You can also remove these services on this form.

2. Complete the following fields:

Unified Logon Service Name

Enter the name for your unified logon server.

OneWorld Port Number

The port number for your unified logon server should match the OneWorld port number of the OneWorld server for which you want to set up unified logon.

• Service Executable Filename

Enter the directory path for the unified logon service program.

• Log Filename

Enter the name of the unified logon log file, including the full directory path.

3. The default user list contains all authenticated network users. If you need to create a custom user list, enter users or groups in the Users or User Groups box to add user information to the unified logon user list.

**Note:** Generally, the default Windows NT list of authenticated network users lists users by group.

4. Click the Install Service button to save the service information for the unified logon server.

# To remove a service for unified logon

1. Run UniLogonSetup.exe.

The Unified Logon Server Setup form appears.

2. From the Unified Logon Service Name drop-down listbox, choose a unified logon server, and then click the Uninstall Service button.

OneWorld Xe (09/00) 10–81

# ActivEra Portal Configuration

Through the OneWorld Security Workbench application, you can determine, for users, groups, and \*PUBLIC, who can access the ActivEra Portal and its configuration forms such as personalization and component management. Through the Portal, you can exercise an even greater level of control by granting access privileges to different workspaces and components. You can also customize the two Portal toolbars.

ActivEra Portal configuration consists of the following topics:

Configuring ActivEra Portal security
Configuring the Portal toolbars
Setting workspace permissions
Setting component permissions
Changing the Appearance of the ActivEra Portal in the OneWorld Foundation guide for information about changing the Portal's background images and logo

# Configuring ActivEra Portal Security

See Also

The ActivEra Portal Security application allows you to control, for individuals or for groups, access to the ActivEra Portal and to the following ActivEra Portal interface forms:

- Portal Personalization The Portal Personalization form to allows you to specify components, colors, and so forth on a user's Portal workspace.
- Component Management The Component Management form allows you to add, change, and delete Portal components from the system.
- Relationships The Relationships form allows you to define view, select, and edit permissions for individual Portal components or workspaces based on user IDs or roles.
- Toolbars The Toolbars form allows you to configure the Enterprise Navigation and Secondary Navigation toolbars.

**Note:** Do not confuse the Personalization form for the Portal with the personalization mode for Portal components. You cannot prevent users from accessing the personalization mode for components with the ActivEra Portal Security application.

#### To configure ActivEra Portal Security

1. From the Security Maintenance menu (GH9052), launch Security Workbench (P00950).

The Work with User/Group Security form appears.

2. From the Form menu, select Portal Security.

The Portal Security form appears.

3. In the User/Group field, enter the ID of the user or the group for whom you want to establish security.

Use the visual assist to access the User Search & Select form to locate a user or a group.

- 4. To deny access to the ActivEra Portal, select the Hide option. To allow access to the ActivEra Portal, select the View option.
- 5. To allow access to the various ActivEra Portal interface forms, click the appropriate checkboxes.

Leaving a box unchecked means that the user or group will not see the corresponding link on their Workspace Navigation and Secondary Navigation toolbars.

6. Click OK when finished.

# **Configuring the Portal Toolbars**

You can create and modify buttons for the Enterprise Navigation toolbar and links for the Secondary Navigation toolbar. All buttons and links execute URLs when clicked. Besides specifying their functions, you can also specify the appearance of buttons on the Enterprise Navigation toolbar. URLs which are not fully qualified are assumed to reside on the jas server.

If you point a button to a Portal URL, you can configure the Secondary Navigation toolbar to appear as you like while that particular URL target is displayed. If the URL is outside of the Portal, then neither toolbar appears.

Both toolbars are managed from the Portal Toolbar Manager in the Portal. To configure the toolbars using OneWorld applications, you use Work With Top-Level Navigation Icons and Work With Secondary Navigation.

Configuring the Portal toolbars is composed of the following topics:

Working with the Portal Toolbar Manager
Configuring Portal toolbars in OneWorld

### Working with the Portal Toolbar Manager

To navigate to the Portal Toolbar Manager, from the Portal, click Personalize on the Secondary Navigation toolbar, and then click Toolbar. This form displays all of the buttons available on the Enterprise Navigation toolbar. Click Edit on a button's line to edit the button and its associated Secondary Navigation toolbar. Click Delete on a button's line to delete the button. When you delete a button, you remove the button and its associated information from the Portal tables; you do not delete its URL targets from the system.

**Warning:** Button deletion is instantaneous. The system does not confirm deletion of a button, and after you delete a button, you cannot undo the deletion.

To configure the Portal's toolbars, perform the following tasks:

- Create an Enterprise Navigation toolbar button
- Configure the Enterprise Navigation toolbar
- Configure the Secondary Navigation toolbar

# To create an Enterprise Navigation toolbar button

- 1. From the Portal Toolbar Manager, click Add.
- 2. Complete the following fields in the Add Toolbar Icon section of the form:
  - Icon Name

Enter the system name for the button in this 10-character field.

Description

The button's description will be used as its hover help. That is, the description appears when the user momentarily holds the mouse pointer over the button.

- Image URL
- Link URL

OneWorld Xe (09/00) 10–85

To link to a specific workspace, append the following to the end of the URL: ?FORMACTION=LOADING&NEWLAYOUT=myworkspace where *myworkspace* is the system name of the workspace that you want to display.

3. Choose a role for which you want to have the button accessible.

If you want all users to see the button, select PUBLIC.

4. Click Add.

The new button is added to the list of buttons available on the Enterprise Navigation toolbar.

**Note:** You must assign the button a sequence number or it will not appear on the toolbar.

#### To configure the Enterprise Navigation toolbar

This process describes how to determine the appearance and the order of buttons on the Enterprise Navigation toolbar. For instructions on choosing a different URL for the toolbar's background image, see *Changing the Appearance of the ActivEra Portal* in the *OneWorld Foundation* guide.

1. From the Portal Toolbar Manager, use the drop-down fields in the Sequence column to arrange the order of the available buttons.

Buttons with a dash in the Sequence column instead of a number will not appear on the toolbar.

2. Click Update at the bottom of the form.

The system reorders the button icons on the form, but not on the toolbar.

3. To reorder the buttons on the Enterprise Navigation toolbar, click Commit at the bottom of the form.

The system updates the Enterprise Navigation toolbar with the new button sequence.

#### To configure the Secondary Navigation toolbar

- 1. From the Portal Toolbar Manager, select the button that you want to define and associate with a Secondary Navigation toolbar, and then click Edit on the line next to the button.
- 2. In the Secondary Navigation Links section of the form, complete the following fields for each link that you want to create:

Description

This is the title of the link as it appears on the Secondary Navigation toolbar.

Link URL

This is the URL to access when the user clicks the link description.

- 3. Choose one or more of the following Portal-supplied links if you want them to appear on the toolbar:
  - Link to Logoff

This link allows users to log off of the Portal.

Link to Personalize

This link allows users to navigate to the Portal Personalization form. If users are denied access to the Portal Personalization form through the Security Workbench, they will not see the Personalize link regardless of whether you include it on the toolbar.

Display Workspace Drop Down

This option displays the drop-down menu from which users can choose a different workspace to display.

The appearance of other Portal-supplied links such as Components and Relationships are controlled through the Security Workbench. See *Configuring ActivEra Portal Security* for more information.

Portal-supplied links that you choose appear to the right of the user-defined links that you define and include on the toolbar.

- 4. In the Sequence Number columns, choose a number for each link to define the order in which the links should appear on the toolbar.
- 5. Click Update at the bottom of the form.
- 6. Click Commit at the bottom of the form.

### Configuring Portal Toolbars in OneWorld

You perform all Portal toolbar configuration tasks from the ActivEra Portal Applications Maintenance application (P9060). Configuring the Enterprise Navigation toolbar occurs when you create or edit any of its buttons.

To configure the Portal's toolbars, perform the following tasks:

• Create an Enterprise Navigation toolbar button

- Change an Enterprise Navigation toolbar button
- Create a Secondary Navigation toolbar
- Change a Secondary Navigation toolbar

# To create an Enterprise Navigation toolbar button

- 1. On ActivEra Portal Applications Maintenance, click Work with Top-Level Navigation Icon.
- 2. On Work with Top-Level Navigation Icons, click Add.
- 3. On Top-Level Navigation Icon Revisions, complete the following fields to define the button:
  - To-Level Navigation Icon Name

Enter the system name for the button in this 10-character field.

Description

The button's description will be used as its hover help. That is, the description appears when the user momentarily holds the mouse pointer over the button.

Icon Sequence

The system arranges buttons on the toolbar from lowest to highest in the sequence. Enter a number in this field to place the button appropriately relative to already existing buttons.

Icon Role

Enter the role for which you want to have the button accessible. If you want all the users to see the button, enter \*PUBLIC.

- Image URL
- Portal URL

To link to a specific workspace, append the following to the end of the URL: ?FORMACTION=LOADING&NEWLAYOUT=myworkspace where *myworkspace* is the system name of the workspace that you want to display.

- 4. If you entered a Portal-based URL in the Portal URL field, complete the following fields to define the Portal-supplied links you want to appear on the Secondary Navigation toolbar. (The Secondary Navigation toolbar does not appear if the button's URL points outside the Portal.)
  - Log Off

This link allows users to log off of the Portal.

#### Personalization

This link allows users to navigate to the Portal Personalization form. If users are denied access to the Portal Personalization form through the Security Workbench, they will not see the Personalize link regardless of whether you include it on the toolbar.

#### Drop Down

This option displays the drop-down menu from which users can choose a different workspace to display.

The appearance of other Portal-supplied links such as Components and Relationships are controlled through the Security Workbench. See *Configuring ActivEra Portal Security* for more information.

Portal-supplied links that you choose appear to the right of the user-defined links that you define and include on the toolbar.

#### 5. Click OK.

The new button is added to the list of buttons available on the Enterprise Navigation toolbar.

# To change an Enterprise Navigation toolbar button

- 1. On ActivEra Portal Applications Maintenance, click Work with Top-Level Navigation Icon.
- 2. On Work with Top-Level Navigation Icons, click Find.
- 3. Click a grid row containing a button you want to work with, and then click Select.
- 4. Change the button's parameters as desired, and then click OK.

# To create a Secondary Navigation toolbar

- 1. On ActivEra Portal Applications Maintenance, click Work with Top-Level Navigation Icon.
- 2. On Work with Top-Level Navigation Icons, click Find.
- 3. From the Portal Toolbar Manager, select the button that you want to define a Secondary Navigation toolbar for, and then click Select.
- 4. On Top-Level Navigation Icons Revisions, select Secondary Navigation from the Form menu.

- 5. On Secondary Navigation Revisions, complete the following fields for each link that you want to create:
  - Secondary Navigation Sequence

The system arranges links on the toolbar from lowest to highest in the sequence.

Secondary Navigation Text

This is the title of the link as it appears on the Secondary Navigation toolbar.

• Secondary Navigation URL

This is the URL to access when the user clicks the link description.

You determine the appearance of the Portal-supplied links, Log Off, Personalization, and Drop Down when you create the Enterprise Navigation Toolbar button associated with this Secondary Navigation toolbar. See *To Create an Enterprise Navigation Toolbar Button* for more information.

The appearance of other Portal-supplied links such as Components and Relationships are controlled through the Security Workbench. See *Configuring ActivEra Portal Security* for more information.

Portal-supplied links that you choose appear to the right of the user-defined links that you define and include on the toolbar.

6. After adding as many links as you want, click OK.

# To change a Secondary Navigation toolbar

- 1. On ActivEra Portal Applications Maintenance, click Work with Secondary Navigation.
- 2. On Work with Secondary Navigation, click Find.
- 3. Choose the link you want to change, and then click Select.

If a toolbar has more than one link, choose any of the links.

4. On Secondary Navigation Revisions, you can change the order of the links, delete links, add links, or change links. When finished, click OK.

# **Setting Workspace Permissions**

After creating a workspace for the ActivEra Portal, you can designate viewable/editable rights for users, roles, or \*PUBLIC.

Workspace permissions work in conjunction with component permissions. If you grant users access to a workspace but do not grant them access to the components on that workspace, then users will see a blank workspace. Furthermore, the standard OneWorld order of precedence applies to levels of permissions, with role-level permissions overriding \*PUBLIC -level permissions and user-level permissions overriding role-level.

Setting workspace permissions contains the following topics:

- Set workspace permissions with the Portal
- Set workspace permissions with OneWorld

#### See Also

☐ Creating a New Workspace in the OneWorld Foundation guide for instructions on creating a Portal workspace

# To set workspace permissions with the Portal

1. From the Portal, click Personalize on the Secondary Navigation toolbar.

The Portal Personalization form appears.

- 2. Choose a workspace from the drop-down menu on the Secondary Navigation toolbar.
- 3. Click Relationships.

The Portal User/Object Relationships form appears.

4. Choose the User, Role, or Public option.

If you want to define access for a user, choose the user option, and then enter the user's ID.

If you want to define access for a role, choose the role option, and then choose a role from the associated drop-down menu.

- 5. From the drop-down menu directly beneath the Public option, choose whether you want the user, role, or \*PUBLIC to have viewable or viewable/editable access to the workspace.
- 6. Click Submit.

The user, role, or \*PUBLIC appears in the Edit/Remove Relationships for Workspace section of the form.

- To change access type for a user, role, or \*PUBLIC, choose a different access type from the Accessibility drop-down menu, and then click Submit.
- 8. To delete a user, role, or \*PUBLIC from the access list, click the checkbox next to the line to be deleted, and then click Submit.
- 9. To add other users or roles to the access list, repeat steps 4-6.

# To set workspace permissions with OneWorld

- 1. On ActivEra Portal Applications Maintenance, click Work with Component/Workspace Relationship.
- 2. On Work with Component/Workspace Relationship, click Find.
- 3. Choose a workspace, and then click Select.
- 4. For each user or role for which you want to define access to the workspace, complete the following fields, and then click OK:
  - Relationship User/Role

Enter a user or role ID, or enter \*PUBLIC.

Modify Flag

Choose the type of access you want the user or role to have to the workspace.

# **Setting Component Permissions**

After creating a component for the ActivEra Portal, you can designate viewable/selectable/editable rights for users, roles, or \*PUBLIC. Granting selectable privileges means that the user, role, or \*PUBLIC will be able to see the component in the Work with Components section of the Portal Personalization form. Consequently, such users can choose to include selectable components in their private workspaces.

Component permissions work in conjunction with workspace permissions. If you grant users access to a workspace but do not grant them access to the components on that workspace, then users will see a blank workspace. Furthermore, the standard OneWorld order of precedence applies to levels of permissions, with role-level permissions overriding \*PUBLIC -level permissions and user-level permission overriding role-level.

Setting component permissions contains the following topics:

- Setting component permissions with the Portal
- Setting component permissions with OneWorld

#### See Also

☐ ActivEra Portal Design in the OneWorld Development Tools guide for information on creating Portal components

### To set component permissions with the Portal

1. From the Portal, click Personalize on the Secondary Navigation toolbar.

The Portal Personalization form appears.

2. Click Components.

The Component Manager appears.

3. Choose a component, and then click Edit Selected.

The Component Edit form appears.

4. Click Relationships.

The Portal User/Object Relationships form appears.

5. Choose the User, Role, or Public option.

If you want to define access for a user, choose the user option, and then enter the user's ID.

If you want to define access for a role, choose the role option, and then select a role from the associated drop-down menu.

- 6. From the drop-down menu directly beneath the Public option, choose whether you want the user, role, or \*PUBLIC to have viewable, viewable/selectable or viewable/selectable/editable access to the component.
- 7. Click Submit.

The user, role, or \*PUBLIC appears in the Edit/Remove Relationships for Workspace section of the form.

8. To change access type for a user, role, or \*PUBLIC, choose a different access type from the Accessibility drop-down menu, and then click Submit.

- 9. To delete a user, role, or \*PUBLIC from the access list, click the checkbox next to the line to be deleted, and then click Submit.
- 10. Repeat steps 5-7 to add other users or roles to the access list.

# To set component permissions with OneWorld

- 1. On ActivEra Portal Applications Maintenance, click Work with Component/Workspace Relationship.
- 2. On Work with Component/Workspace Relationship, click Find.
- 3. Choose a component, and then click Select.
- 4. For each user or role for which you want to define access to the component, complete the following fields, and then click OK:
  - Relationship User/Role

Enter a user or role ID, or enter \*PUBLIC.

Modify Flag

Choose the type of access you want the user or role to have to the component.

# **Solution Explorer Security**

Use the Security Workbench application (P00950) to set up security for Solution Explorer. Setting up security correctly ensures that users in the system will have permission to perform only those actions that are essential to their jobs. Beyond the Explorer itself, you can set security for these Solution Explorer features:

- Internet
- Documentation
- Fine Cut
- Favorites
- Effectivity dating (date of release)
- Fast Path
- Rough Cut
- Universal Director

You can set various levels of security for each of these features.

Understanding security settings for Solution Explorer
Viewing Solution Explorer security settings
Configuring Solution Explorer security
Using default security settings for Solution Explorer

# **Understanding Security Settings for Solution Explorer**

The following table summarizes the security settings available for many of the Explorer features and the meanings of each:

Security Setting	Meaning
Secured	Restricts the user from accessing the feature.
View	Allows the user read-only access to the feature with no modification capability

Add	Allows the user to add data to the system, but does not allow the user to delete data.
Change	Gives the user full access to the feature with no restrictions on changing, adding, or deleting data.

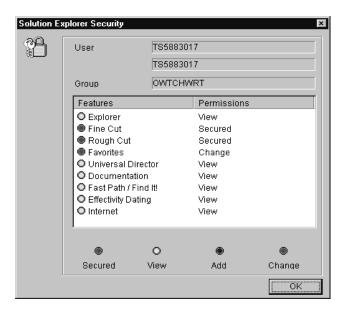
# **Viewing Solution Explorer Security Settings**

Viewing security settings in Solution Explorer allows you to check the permissions for each feature for any user in the system. You view the settings by logging into the Solution Explorer as the particular user whose settings you want to view, and then click the security button in the status bar of the Solution Explorer Home Page, which launches the Solution Explorer Security form. Keep in mind, however, that you cannot make changes to the security settings by launching this form.

### To view Solution Explorer security settings

1. From any view in ActivEra, double-click the Security button (the lock icon) in the status bar.

The ActivEra Security form appears.



2. After you check the permissions for each feature, click OK to close the form.

# **Configuring Solution Explorer Security**

You can set different levels of security for different groups or individuals within your system.

## • т

## To configure Solution Explorer security

1. From the Security Maintenance menu (GH9052), launch Security Workbench (P00950).

The Work With User/Group Security form appears.

2. From the Form menu, choose Setup Security, then Solution Explorer.

The Work with Solution Explorer Security Revisions form appears.

3. In the User/Group field, enter the user or group ID for which you want to configure security.

Use the Visual Assist to bring up the User Search & Select form so you can find a user or group.

- 4. Choose security setting options for each feature, and then click OK.
- 5. If you want to automatically apply settings to a group or to an individual user, click one of the Preset buttons.
- 6. Repeat steps 2–4 for each user or group that you want to configure security for.

**Note:** If you secure the Fast Path parameter, users cannot use the Find It! feature to search for OneWorld objects. In addition, with Fast Path secured, you cannot add new tasks to the Favorites task view with the Insert New Task function. See *Solution Explorer Implementation Guide* for more details on using Solution Explorer.

# **Using Default Security Settings for Solution Explorer**

The Work With Solution Explorer Security Revisions form contains Preset buttons on the exit bar that represent default security settings for different types of users in your system. These user types correspond to novice (Preset 1), intermediate (Preset 2), and expert users (Preset 3). If you click one of these Preset buttons, Solution Explorer changes the Security Revisions default settings for each feature.

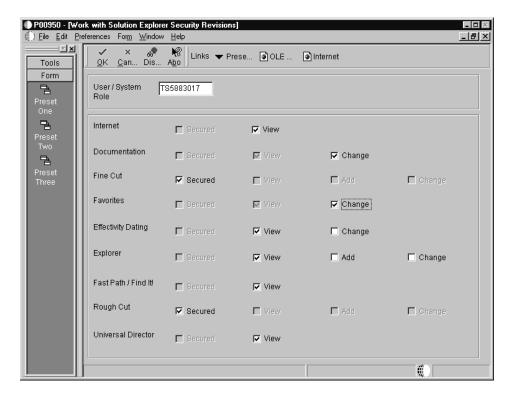
Novice users require the most restrictive security settings, while expert users require the least restrictive settings. Although you can fine-tune these default settings for any particular individual, using the default settings can free you from the laborious task of manually choosing security setting options for every

individual in the system because you can apply them to groups as well as to individual users.

## To use default security settings

- 1. On the Work With User/Group Security form, click Add to set up security for a new user, or locate the task and click Select for an existing user.
- 2. From the Work with Solution Explorer Security Revisions form, choose one of the following options from the Form menu:
  - Preset 1
  - Preset 2
  - Preset 3

Solution Explorer automatically chooses the default security options, based on the Preset button that you clicked.



3. Click OK.

# **Vocabulary Overrides**

Vocabulary Overrides is an application that you can use to change the text that appears on forms and reports. You can specify both form columns and row headings, provide customization for multiple languages and industries, and retain your overrides with your next OneWorld software update.

Because the Vocabulary Overrides application (P9220) affects the user interface throughout OneWorld, it is very important that you secure this application from most of your users. When you work with Vocabulary Overrides for an interactive or batch application, Vocabulary Overrides simulates an application check out from your central objects repository, just as if you checked out the application using Object Management Workbench. This is done so that, while you are working on the application in Vocabulary Overrides, no one can check out the application.

**Note:** When the Object Management Workbench line is written for Vocabulary Overrides, no specifications are brought down to the requesting workstation. Instead, the requesting workstation accesses the relational database tables directly. See the *OneWorld Development Tools* guide for information about using Object Management Workbench and checking applications in and out.

After you make vocabulary override changes, use an update package to push these changes to your users. See the *Package Management Guide* for information about building packages. You do *not* need to rebuild the application before building it into a package if the only change to the application is due to vocabulary overrides.

8
Accessing vocabulary overrides
Creating vocabulary overrides
Reviewing vocabulary overrides
Resetting vocabulary overrides

This section contains the following:

# **Accessing Vocabulary Overrides**

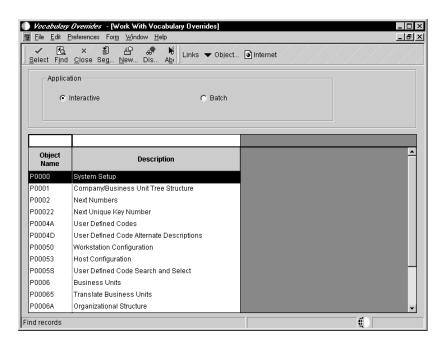
You can access the Vocabulary Overrides application from either a OneWorld Explorer menu (System Administration Tools) or from within Object Management Workbench.

This chapter contains the following topics:

- Accessing Vocabulary Overrides from System Administration Tools
- Accessing Vocabulary Overrides from Object Management Workbench

# To access Vocabulary Overrides from System Administration Tools

- 1. From System Administration Tools (GH9011), choose Vocabulary Overrides (P9220).
  - The Work With Vocabulary Overrides form appears. Use this form to choose the application for which you want to create vocabulary overrides.
- 2. On Work With Vocabulary Overrides, under the Application heading, click Interactive or Batch. Use the query by example fields if you want to refine your search, and then click Find.



3. Choose the application that you want and click Select.

If the application you selected is already checked out, an error message appears, which reads: "This object is currently in use by Object Management Workbench and, therefore, unavailable." You will have to create vocabulary overrides for this application at another time or contact the user(s) of the application to see if they can check in or erase their checkout.

- 4. If the SAR Requirement form appears, complete the following field:
  - SAR Number

Enter a SAR number. This form appears if the system administrator set up the processing option for Vocabulary Overrides to require a SAR number for overrides.

The Interactive Vocabulary Overrides form or the Batch Vocabulary Overrides form appears. All of the interactive forms or batch versions associated with the application that you selected appear in the detail area. You can expand any row that has a plus (+) sign on the left side.

The Vocabulary Overrides application essentially checks out this application in Object Management Workbench. This is done so that while you are working on the application in Vocabulary Overrides no one can check the application out. After you finish creating overrides, Vocabulary Overrides erases the checkout in Object Management Workbench.

Field	Explanation
Object Name	The OneWorld architecture is object based. This means that discrete software objects are the building blocks for all applications, and that developers can reuse the objects in multiple applications. Each object is stored in the Object Management Workbench. Examples of OneWorld objects include:  • Batch Applications • Interactive Applications • Business Views • Business Functions • Business Functions • Event Rules • Media Object Data Structures
Description	The description of a record in the Software Versions Repository file. The member description is consistent with the base member description.

# To access Vocabulary Overrides from Object Management Workbench

1. In the Fast Path, type OMW and press Enter.

The Object Management Workbench form appears.

2. Click Find, then Objects, then choose an interactive or batch application, and then click the Design button.

The Object Librarian Application Design form or the Object Librarian Batch Application Design form appears.

3. On the Design Tools tab, choose Vocabulary Overrides.

A Vocabulary Override Warning form appears with the following text: "Warning! You are now accessing Vocabulary Overrides. This application will override currently checked in objects. You must have authority to make changes."

- 4. If you have authorization to make Vocabulary Override changes, click OK on the Vocabulary Override Warning.
- 5. If the SAR Requirement form appears, complete the following field:
  - SAR Number

Enter a SAR number. This form appears if the system administrator sets the processing option that requires a SAR number for Vocabulary Overrides.

The Work with Vocabulary Overrides form appears.

6. Click Select.

The Interactive Vocabulary Overrides form or the Batch Vocabulary Overrides form appears. All of the interactive forms or batch versions associated with the application appear in the detail area. You can expand any row that has a plus (+) sign on the left side.

The Vocabulary Overrides application essentially checks out this application in Object Management Workbench. This is done so that while you are working on the application in Vocabulary Overrides no one can check out the application. After you finish creating overrides, Vocabulary Overrides erases the checkout in Object Management Workbench.

# **Creating Vocabulary Overrides**

You can create vocabulary overrides to customize your interactive and batch OneWorld applications. After you make vocabulary override changes, use an update package to push these changes to your users. For example, you could create vocabulary overrides for the Verify OCM report. After you make vocabulary override changes, you should use an Update Package to push these changes to your users.

You do *not* need to rebuild the application before building it into a package if the only change to the application is due to vocabulary overrides. See the *Package Management Guide* for information about building packages.

**Note:** When you create a vocabulary override for a report, the override occurs at the version level. When you run the version, the vocabulary override appears on the report instead of the data dictionary description. The vocabulary override does not affect the base report specifications or any other version of the report.

Complete the following tasks:

- Create interactive vocabulary overrides
- Create batch vocabulary overrides

# To create interactive vocabulary overrides

To access the Vocabulary Overrides form, see *Accessing Vocabulary Overrides* in this section.

- 1. To work with a language other than the domestic language, on Interactive Vocabulary Overrides, complete the following field, and then click Find:
  - Language

Enter a language code. Leave this field blank if you are creating vocabulary overrides in your domestic language.

2. Double-click the + icon next to one of the forms listed in the detail area.

The form expands, displaying the types of text that are available on that form, such as find/browse text, control text, grid column text, exit text, and text variables.

3. Double-click the + icon on one of the types of text.

The type of text expands, displaying all of the text that you can override.

4. To create a vocabulary override, change the text in the Description column for a particular item. Click OK when you finish creating overrides.

**Note:** Some descriptions for data items contain carriage returns and new-line characters. To create a vocabulary override for these descriptions (indicated with a special icon to the left of that row), choose the data item row, and from the Row menu, choose Extended Text Revision.

The Extended Text Revision form appears. Change the text in the field, then click OK.

The Vocabulary Overrides application essentially checks out this application in Object Management Workbench. This is done so that while you are working on the application in Vocabulary Overrides no one can check the application out. After you finish creating overrides, Vocabulary Overrides erases the checkout in Object Management Workbench.

Field	Explanation
Language	A user defined code (system 01/type LP) that specifies a language to use in forms and printed reports.
	Before any translations can become effective, a language code must exist at either the system level or in your user preferences.
Form Name	The unique name assigned to a form.
Description	A free-form text field for comments or memoranda.
Override	Identifies whether the default value of a particular text item has been overridden. Overrides are defined during development of interactive and batch applications when the developer determines that the data dictionary value, or current text, is not appropriate or explicit enough for the particular application. When the interactive or batch application runs, the text is changed and this flag is set. The following values are valid:  O Indicates the text is the original value. If it is a data item releated field, then it is the same as the data dictionary.  Indicates the original text, often the data dictionary default, has been overridden.

Field	Explanation
Data Item	For World, the RPG data name. This data field has been set up as a 10-byte field for future use. Currently, it is restricted to 4 bytes so that, when preceded by a 2-byte table prefix, the RPG data name will not exceed 6 bytes.
	Within the Data Dictionary, all data items are referenced by this 4-byte data name. As they are used in database tables, a 2-character prefix is added to create unique data names in each table specification (DDS). If you are adding an error message, this field must be left blank. The system assigns the error message number using next numbers. The name appears on a successful add. You should assign error message numbers greater than 5000. Special characters are not allowed as part of the data item name, with the exception of #, @, \$.
	You can create protected data names by using \$xxx and @xxx, where you define xxx.
	For OneWorld, a code that identifies and defines unit of information. It is an 8-character, alphabetical code that does not allow blanks or special characters such as: % & , . +.
	Create new data items using system codes 55-59.
	The alias cannot be changed.
Text Type	A user defined name or remark.
	Form-specific information
	Used to display the type of control with which the text is associated. For example, the text Grid Column would indicate that the text is a column header in a grid.
Visible	Indicates whether the data item or text for a data item is visible on a form or report. This is defined during development of the form or report when the developer determines that a data item is required for processing, but should not be visible on the form or report. The valid values are:  1 The data item or data item text are visible on the form or report  0 The data item or data item text are not visible on the form or report

# See Also

Object Management Workbench and Checkout Log in the Development Tools Guide for more information about how OneWorld checks objects in and out.
Package Management Guide for information about deploying changed

OneWorld Xe (09/00) 11–9

applications to users.



## To create batch vocabulary overrides

To access the Vocabulary Overrides form, see *Accessing Vocabulary Overrides* in this section.

- 1. To work with a language other than the domestic language, on Batch Vocabulary Overrides, complete the following field, and then click Find:
  - Language

Enter a language code. Leave this field blank if you are creating vocabulary overrides in your base (domestic) language.

2. Double-click the + icon next to one of the versions listed in the detail area.

The version expands, displaying the types of text that are available on that version, such as page header and group sections.

3. Double-click on the plus (+) sign icon next to one of the types of text.

The type of text expands, displaying all of the text that you can override.

4. To create a vocabulary override, change the text in the Description column for a particular item. Click OK when you finish creating overrides.

The Vocabulary Overrides application essentially checks out this application in Object Management Workbench. This is done so that, while you are working on the application in Vocabulary Overrides, no one can check the application out. After you finish creating overrides, Vocabulary Overrides erases the checkout in Object Management Workbench.

Field	Explanation
Language	A user defined code (system 01/type LP) that specifies a language to use in forms and printed reports.
	Before any translations can become effective, a language code must exist at either the system level or in your user preferences.
Version	The name given to identify a version of the software.
Section	A user defined name or remark.
Description	A free-form text field for comments or memoranda.

Field	Explanation
Override	Identifies whether the default value of a particular text item has been overridden. Overrides are defined during development of interactive and batch applications when the developer determines that the Data Dictionary value is not appropriate or explicit enough for the particular application. When the interactive or batch application runs, the text is changed and this flag is set. The following values are valid:  0 The text is the original value from Data Dictionary  1 The Data Dictionary default value has been overridden
Data Item	For World, the RPG data name. This data field has been set up as a 10-byte field for future use. Currently, it is restricted to 4 bytes so that, when preceded by a 2-byte table prefix, the RPG data name will not exceed 6 bytes.
	Within the Data Dictionary, all data items are referenced by this 4-byte data name. As they are used in database tables, a 2-character prefix is added to create unique data names in each table specification (DDS). If you are adding an error message, this field must be left blank. The system assigns the error message number using next numbers. The name appears on a successful add. You should assign error message numbers greater than 5000. Special characters are not allowed as part of the data item name, with the exception of #, @, \$.
	You can create protected data names by using \$xxx and @xxx, where you define xxx.
	For OneWorld, a code that identifies and defines unit of information. It is an 8-character, alphabetical code that does not allow blanks or special characters such as: % & , . +.
	Create new data items using system codes 55-59.
	The alias cannot be changed.
Control	A user defined name or remark.
Visible	Indicates whether the data item or text for a data item is visible on a form or report. This is defined during development of the form or report when the developer determines that a data item is required for processing, but should not be visible on the form or report. The valid values are:  1 The data item or data item text are visible on the form or report  0 The data item or data item text are not visible on
	the form or report

OneWorld Xe (09/00) 11–11

# **Reviewing Vocabulary Overrides**

You can use Vocabulary Overrides to review every location in OneWorld where someone has overidden a data item. You can view the override locations either from a form or from a report.

# To review Vocabulary Overrides

1. From System Administration Tools (GH9011), choose Vocabulary Overrides (P9220).

The Work With Vocabulary Overrides form appears.

2. On Work With Vocabulary Overrides, from the Form menu, choose Overrides.

The Overridden Data Item Search form appears.

- 3. Complete the following, then click OK.
  - Enter a Data Item to search for

Enter the name of a data item into the Data Item field.

• Select a scope for the Application search

Click on either Interactive, Batch, or Both. This will refine the search for the data item to only interactive or batch applications.

Output results to

Click either Interactive Application or Printed Report. This determines how you want to view the results of your search.

If you choose to view your search using the Interactive Application, the Data Item Locator form appears when this search is complete. This form displays a list of all of the applications, in which the data item appears.

If you choose to view your search via the printed report, an Adobe Acrobat Portable Document Format (PDF) file is created, which you can view or print.

# **Resetting Vocabulary Overrides**

You can reset vocabulary overrides to the original data dictionary definition. If you need to reset multiple vocabulary overrides to the default data dictionary definition, OneWorld provides an automated process that resets overrides at the interactive form level, the batch version level, and the interactive and batch application level. When you reset vocabulary overrides at the form level, you reset all vocabulary overrides on a specific form, for example, the Work with Addresses form (W01012B) in the Address Book application. When you reset vocabulary overrides at the application level, you reset all vocabulary overrides on all forms or versions in an entire interactive or batch application, for example, the Address Book application (P0101) or the Print Mailing Labels report (R01401).

Complete the following tasks:

- Reset a vocabulary override
- Reset all vocabulary overrides on a form (interactive)
- Reset all vocabulary overrides in a version (batch)
- Reset all vocabulary overrides in an application (interactive and batch)

## **Before You Begin**

Access the Vocabulary Overrides application. See *Accessing Vocabulary Overrides* in this section.

# To reset a vocabulary override

- 1. On the Work with Vocabulary Overrides form, click one of the following options and click Find:
  - Interactive
  - Batch
- 2. Choose an application and click Select.

Depending on the application type, one of the following forms appears:

• If you chose an interactive application, the Interactive Vocabulary Overrides form appears. The forms associated with the application appear in the detail area on this form.

- If you chose a batch application, the Batch Vocabulary Overrides form appears. The versions associated with the application appear in the detail area on this form.
- 3. Double-click the + icon in the row header for one of the forms or versions in the detail area, and then double-click the + icon in the row header for a type of text on the form or a type of section in the version.

The detail area expands to display the data items associated with the type of text or section.

4. Choose the data item that you want to reset, and then from the Row menu, choose Reset Description.

**Note:** The Reset Description menu option is inactive if a vocabulary override does not exist for the data item.

5. Click OK to return to the Work with Vocabulary Overrides form.

If you click Cancel to return to the Work with Vocabulary Overrides form *after* you reset a vocabulary override, you *do not* cancel the action. The data item remains at the default data dictionary definition.

# To reset all vocabulary overrides on a form (interactive)

- 1. On the Work with Vocabulary Overrides form, click the Interactive option and click Find.
- 2. Choose an application and click Select.

The Interactive Vocabulary Overrides form appears. The detail area on this form displays all forms within the application.

3. Choose a form, and then from the Row menu, choose Reset by Form.

OneWorld clears all vocabulary overrides from the form and resets the data items to the data dictionary definitions.

**Caution:** When you choose the Reset by Form menu option, the decision is final. OneWorld does not provide a confirmation box or a proof mode.

# To reset all vocabulary overrides in a version (batch)

- 1. On the Work with Vocabulary Overrides form, click the Batch option and click Find.
- 2. Choose an application and click Select.

The Batch Vocabulary Overrides form appears. The detail area on this form displays all versions for the application.

3. Choose a version, and then from the Row menu, choose Reset by Version.

OneWorld clears all vocabulary overrides from the version and resets the data items to the base definitions. If no base definition exists for a data item, OneWorld resets the data item to the default data dictionary definition.

**Caution:** When you choose the Reset by Version menu option, the decision is final. OneWorld does not provide a confirmation box or a proof mode.

# To reset all vocabulary overrides in an application (interactive and batch)

- 1. On the Work with Vocabulary Overrides form, click one of the following options and click Find:
  - Interactive
  - Batch
- 2. Choose an application and click Select.

Depending on the type of application, either the Interactive Vocabulary Overrides form or the Batch Vocabulary Overrides form appears. The detail area displays forms for interactive applications and versions for batch applications.

3. From the Form menu, choose the Reset by Application menu option for interactive applications or the Reset by Batch menu option for batch applications.

OneWorld clears all vocabulary overrides from the *entire* application and resets the data items to the base definitions. If no base definition exists for a data item, OneWorld resets the data item to the default data dictionary definition.

**Caution:** When you choose either the Reset by Application or the Reset by Batch menu option, the decision is final. OneWorld does not provide a confirmation box or a proof mode.

# The Scheduler Application

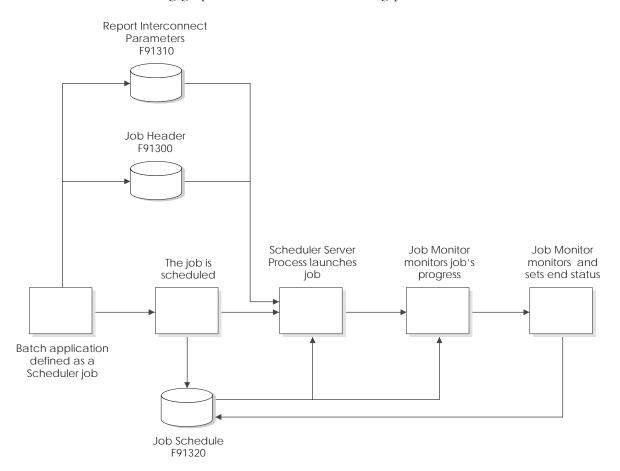
You might occasionally want to run batch jobs that take up a great deal of machine resources or that require users to be signed off after normal working hours. You might also want the flexibility to run jobs at scheduled intervals during the day or even periodically throughout the month or year.

The Scheduler application enables you to schedule batch jobs to run after hours or periodically throughout the day, according to a schedule you define. You can schedule jobs by time, daily, weekly, monthly, yearly, or based on a specified period. You can also set up the scheduler to restart a job in the event of a job failure.

You can specify the server on which you want the job to run, as well as the time zone, regardless of the locale. The Scheduler system uses a modified version of Universal Coordinated Time (UCT), which counts the number of minutes, not seconds.

Scheduling jobs
Working with job properties
Working with the job schedule
Understanding the Scheduler server
Working with the Scheduler server
Modifying daylight savings rules
Running Scheduler reports

Included in this section are the following topics:



The following graphic illustrates the scheduling process.

When you define a scheduled job, the parameters of that job are stored in the Job Master table (F91300).

After the job is scheduled, the system writes records to the Job Schedule table (F91320), indicating each time that the job should be launched. As the job runs, the Job Monitor monitors the job's progress.

When the job ends, the Job Monitor assigns an end status to the job and updates the job's record in the Job Schedule table to indicate that the job either ended successfully or in error.

# **Scheduling Jobs**

When you schedule a batch process to run through the Scheduler, you can also add a recurrence pattern to the job, which means that the job will restart at the intervals that you define, such as once a week, once a month, or once a year. You schedule jobs in the local time of the server on which the job will run.

This chapter contains the following topics:

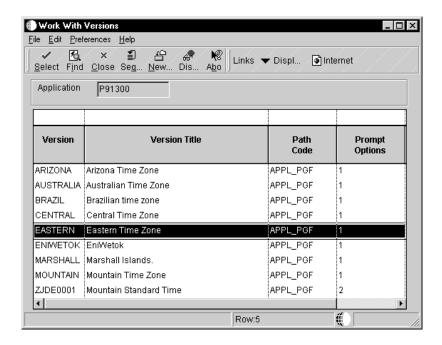
	Scheduling a job
	Scheduling a recurring job
	Revising a scheduled job
	Entering Scheduler processing options
	Reviewing all jobs or local jobs
Before You	Begin
	To use a server's time zone, you must first specify the time zones that you want to use. To do this, copy the Scheduler processing options (version ZJDE0001 on the Work with Versions form) and modify them according to your needs. If you use more than one time zone, you should modify the processing options to display the Work with Versions form each time that you invoke the Schedule Jobs application. That way, you can choose the correct version for the time zone in which you want to schedule the job.

# Scheduling a Job

When you schedule a job, you choose the version of Scheduler which specifies the time zone in which the job will be run, and then you define the parameters of the job. For example, if you want to submit a job from your workstation in Germany that will run on a server in Australia, you would choose the version which specifies the time zone for Australia so that the job runs at the intended time.

## To schedule a job

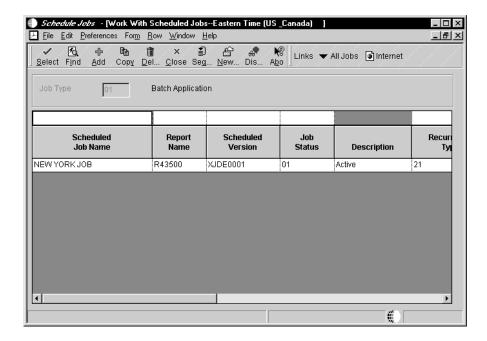
1. From the System Administration Tools menu (GH9011), choose Scheduler (GH9015), and then choose Schedule Jobs (P91300). The Work With Versions form appears.



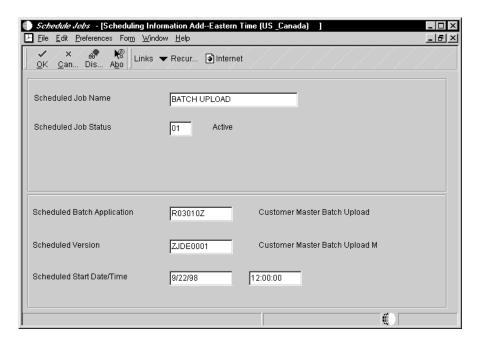
**Note:** If you use only one time zone, you might not be prompted to select a version. In this case, the Work with Versions form does not appear and you can skip the following step. This would have to be changed in the menu properties for P91300. We ship GH9015/P91300 to prompt for the version.

When you select version ZJDE0001, you can enter Scheduler processing options. For more information about entering processing options, see *Entering Scheduler Processing Options*.

2. On the Work With Versions form, choose the version which specifies the time zone in which the scheduled job will run. For example, you might choose the version which specifies the Eastern Time Zone to run jobs in Eastern Standard Time (EST). The Work With Schedule Jobs form appears.



3. On Work With Scheduled Jobs, click Add. The Scheduling Information Add form appears.



- 4. On Scheduling Information Add, complete the following fields:
  - Scheduled Job Name
  - Scheduled Job Status
  - Scheduled Batch Application
  - Scheduled Version

- Scheduled Start Date/Time
- 5. Click OK.

Field	Explanation
Scheduled Job Name	A name that uniquely identifies a scheduled job to the system and the user. Use this name to indicate what the job function is. For example Monthly Close or Nightly Back Up.
Scheduled Job Status	The current status of the scheduled job. As long as the status is active the job will continue to be evaluated to be submitted to run. Once the scheduled end date for the job has been reached the status will be change to not active. The status may be marked as not active or suspended at any other time to stop the scheduler from considering the job for submission. It may then be reactivated so that the scheduler will begin including the job again. The job may only be reactivated if the calculation of the end date produces a date in the future.
Scheduled Start Date/Time	The next date on which the scheduled job will be submitted.
Scheduled Batch Application	The object name of the report that is submitted by the scheduler.
Scheduled Version	The version of the report scheduled to run. A version identifies a specific set of data selections and sequencing settings used by the batch job.

## See Also

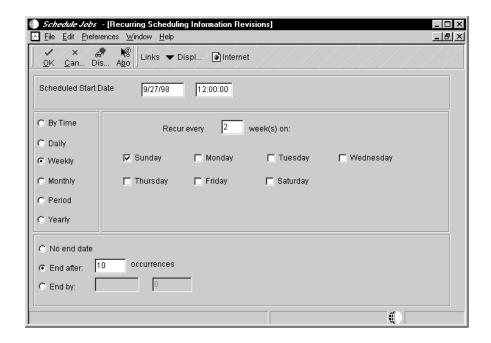
- Scheduling a Recurring Job
- Working with Job Properties
- Entering Scheduler Processing Options

# Scheduling a Recurring Job

You might need to run jobs more than once. In these situations you can set the frequency of recurrence for a scheduled job so that it runs hourly, weekly, biweekly, monthly, and so on. You can also specify how many times you want the job to run before it ends, or you can define a date after which the job will no longer run.

## To schedule a recurring job

1. On the Schedule Information Add form, choose Recurrence from the Row menu.



- 2. On Recurring Scheduling Information Revisions, choose one of the following options and complete the accompanying fields that appear after you choose an option:
  - By time
    - Every n minutes OR
    - Every *n* hours

Run the job at the specified time interval. (For example, run the job every 40 minutes or every 8 hours.)

- Daily
  - Every n days OR
  - Every weekday

Run the job at the specified interval of days or every weekday. (For example, run the job every 7 days or every weekday.)

- Weekly
  - Recur every n weeks on
  - Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

Run the job at the specified weekly interval on the specified day of the week. (For example, run the job every 2 weeks on Monday.)

## Monthly

- Day *n* of every *x* month(s) OR
- The [first, last, and so on] [day, Sunday, Friday, and so on] of every *n* month(s)

Run the job on the specified day of every *x*th month, or on a specific day of every *n*th month. (For example, run the job on day 1 of every 4 months, or on the last Friday of every second month.)

### Period

- Day *n* of every *x* period(s) OR
- The [first, last, and so on] [day, Sunday, Friday, and so on] of every *n* period(s)
- Company

Run the job on the specified day of every *x*th period, or on a specific day of every *n*th period. Also enter the company code associated with that fiscal period. (For example, run the job on day 10 of every 2 periods, or on the last day of every third period.)

## Yearly

- Every [month name] [date] OR
- The [first, last, and so on] [day, Sunday, Friday, and so on] of [month name] OR
- Day x of the [first, last, and so on] period OR
- The [first, last, and so on] [day, Sunday, Friday, and so on] of the [first, last, and so on] period

Run the job at the specified time of the year. For example, you might want to run the job on the last day of December of each year. (For example, run the job every January 1, or on the first Monday of June, or on day 15 of the last period, or on the second Tuesday of the fourth period.)

- 3. Specify when you want the Scheduler to stop submitting the job by choosing one of the following options:
  - No end date
  - End after x occurrences

Where x is the number of occurrences of the job that can run before it expires.

## • End by

Enter the month, day, and year on which you want the job to expire.

## 4. Click OK.

Field	Explanation
Scheduled Start Date	The next date on which the scheduled job will be submitted.
By Time	The type of interval for which the scheduled job should run, such as daily, weekly, monthly or yearly.
Daily	The type of interval for which the scheduled job should run, such as daily, weekly, monthly or yearly.
Weekly	The type of interval for which the scheduled job should run, such as daily, weekly, monthly or yearly.
Monthly	The type of interval for which the scheduled job should run, such as daily, weekly, monthly or yearly.
Period	The type of interval for which the scheduled job should run, such as daily, weekly, monthly or yearly.
Yearly	The type of interval for which the scheduled job should run, such as daily, weekly, monthly or yearly.
No end date	These options limit the time the job will be considered active by the scheduler. You can select either the number of times this job is allowed to run or a date and time for which the job will no longer run. The job will always be considered active if the No end date option is selected.
End after:	These options limit the time the job will be considered active by the scheduler. You can select either the number of times this job is allowed to run or a date and time for which the job will no longer run. The job will always be considered active if the No end date option is selected.
End by:	These options limit the time the job will be considered active by the scheduler. You can select either the number of times this job is allowed to run or a date and time for which the job will no longer run. The job will always be considered active if the No end date option is selected.

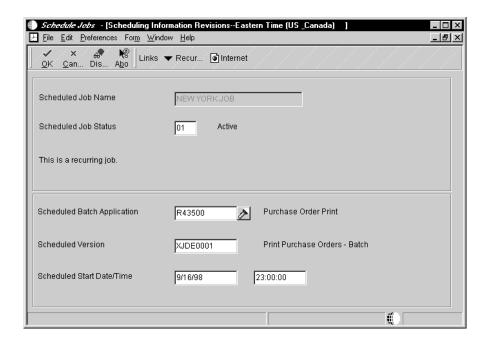
# Revising a Scheduled Job

You might want to revise the information for a job. For example, you might want to change the job status to Active or Not Active. Or, you might want to enter a new batch process as the scheduled job, or change the job start date and time.

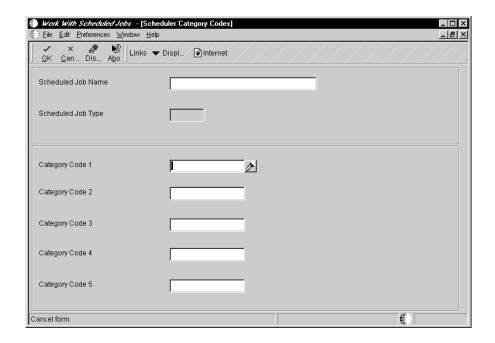


## To revise a scheduled job

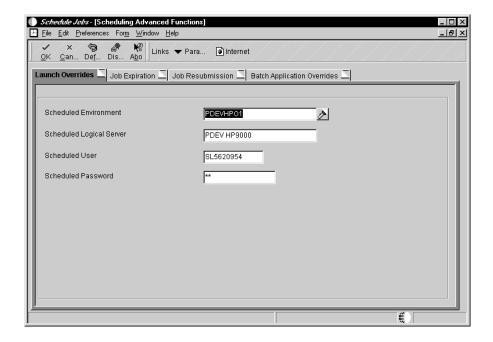
- 1. From the Job Scheduler menu (GH9015), choose Schedule Jobs.
- 2. On Work with Versions, choose the version which specifies the time zone in which the job will run and click Select.
- 3. On Work with Scheduled Jobs, choose the job that you want to revise, and then choose Job Revisions from the Row menu.



- 4. On Scheduling Information Revisions, modify the following fields as necessary and click OK:
  - Scheduled Job Status
  - Scheduled Batch Application
  - Scheduled Version
  - Scheduled Start Date/Time
- 5. If you want to remove recurrence from a scheduled job, choose Remove Recurrence from the Form menu.
- 6. If you want to add category codes to the scheduled job, choose Category Codes from the Form menu. The Scheduler Category Codes form appears.



7. If you want to revise this job's advanced functions, choose Advanced Functions from the Form menu. The Advanced Scheduling Functions form appears.



For more information about entering advanced functions, see *Working With Job Properties*.

**Note:** You can also activate or inactivate a job by choosing the job on Work With Scheduled Jobs, and then choosing Change Status from the Row menu.

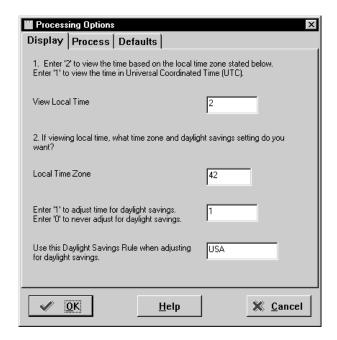
# **Entering Scheduler Processing Options**

The Scheduler processing options enable you to specify preferences and defaults for time zone, job recurrence, and job type. You can enter or change processing options two ways:

- Select version ZJDE0001 from the Work with Versions form.
- From the Job Scheduler menu (GH9015), highlight Schedule Jobs, click the right mouse button, and then select Prompt for Values.

The Scheduler processing options form has three tabs that allow you to change different parameters:

- Display: Enter time zone information.
- Process: Enter information about schedule records.
- Defaults: Enter information about job type, job occurrences, and job resubmissions.



Enter '2' to view the time based on the local time zone stated below. Enter '1' to view the time in Universal Coordinated Time (UCT).

**View Local Time** 

This field enables you to specify how time is displayed. Enter 2 to view time based on the local time zone that you enter in the View Local Time field.

Enter 1 to view time according to Universal Coordinated Time (formerly known as Greenwich Mean Time), which is the time at the Greenwich meridian.

### **Local Time Zone**

The remaining fields apply only if you specified local

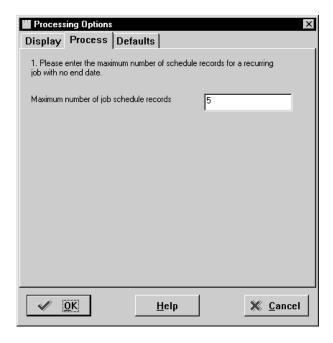
In the Local Time Zone field, use the visual assist to locate the local time zone for the server for which you want to schedule a jog in your area.

Enter '1' to adjust time for daylight savings. Enter '0' to never adjust for daylight savings.

Enter 1 to have OneWorld automatically adjust the time when daylight savings time goes into effect. If you do not want OneWorld to make this adjustment, enter 0.

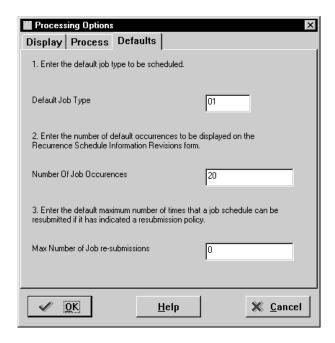
Use this Daylight Savings Rule when adjusting for daylight savings.

If you elect to adjust for Daylight Savings Time, specify the rule to use for making the adjustment. For more information about Daylight Savings rules, see Modifying Daylight Savings Rules.



The number that you enter at this field determines the maximum number of schedule records allowed for each recurring job that has no end date.

## Maximum number of job schedule records.



Use the visual assist to select the default job type, such as batch application.

### **Default Job Type**

The number you enter will be the default number that appears on the Recurrence Schedule Information Revisions form for the number of job occurrences. This setting is a default value only; you can always override the default value.

## **Number of Job Occurrences**

The number you enter will be the default value for the number of times a job can be resubmitted. This setting is a default value only; you can always override the default value.

Max Number of Job re-submissions

# Reviewing all Jobs or Local Jobs

If necessary, you can review all jobs in all time zones, or local jobs only. Depending on the view that you are currently using, the system protects the other choice. For example, if you are currently viewing local jobs, the system would protect the Local Jobs choice and allow you to choose only All Jobs.



## To review all jobs or local jobs

From the Work with Scheduled Jobs form, from the Form menu, choose Display, and then choose either All Jobs or Local Jobs.

Field	Explanation
Scheduled Job Status	The current status of the scheduled job. As long as the status is active the job will continue to be evaluated to be submitted to run. Once the scheduled end date for the job has been reached, the status will be change to not active. The status may be marked as not active or suspended at any other time to stop the scheduler from considering the job for submission. It may then be reactivated so that the scheduler will begin including the job again. The job may only be reactivated if the calculation of the end date produces a date in the future.
Scheduled Batch Application	The object name of the report that is submitted by the scheduler.
Scheduled Version	The version of the report scheduled to run. A version identifies a specific set of data selections and sequencing settings used by the batch job.
Scheduled Start Date/Time	The next date on which the scheduled job will be submitted.

# **Working with Job Properties**

Use advanced functions to override the job properties, such as the location at which the job will run and the environment in which it will run. You can also use Advanced Functions to specify whether you want the system to resubmit a job if it ends in error, or if you want to change job expiration specifications.

You can even define whether to log errors to the jde.log or jdedebug.log and whether you want the system to override printer locations and job queues. You can also add a report interconnect to a job if you want to pass parameters to it.

**Note:** To restore the defaults in the advanced functions application, click the default button on Scheduling Advanced Functions.

The following topics are described:

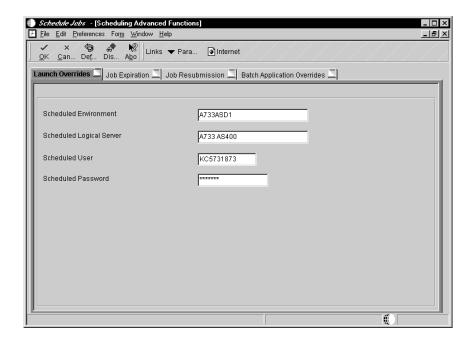
Overriding the environment
Overriding job expiration specifications
Defining when the Scheduler resubmits a job
Overriding batch application specifications
Adding values to a report interconnect

# Overriding the Environment

You might have situations in which you need to override the environment. For example, you would override the environment if the environment in which you want to run the job is not available or if it is different from the environment that you were logged into when you scheduled the job.

# To override the environment

- 1. On the Work With Scheduled Jobs form, choose the job.
- 2. Choose Advanced Functions from the Row menu.



- 3. On Scheduling Advanced Functions, complete the following fields on the Launch Overrides tab as necessary:
  - Scheduled Environment
  - Scheduled Logical Server
  - Scheduled User
  - Scheduled Password

Enter the scheduled user's password in this field.

Field	Explanation
Scheduled Environment	Indicates the environment in which the scheduled job will run.
Scheduled Logical Server	The OneWorld logical server against which the job is submitted.
Scheduled User	Indicates the user ID for which the job will start.
Scheduled Password	Indicates the password required to start the job. This will be encrypted before it is stored the in Job Schedule Master table.

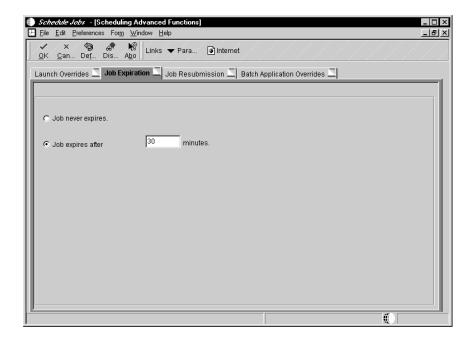
## **Overriding Job Expiration Specifications**

Job expiration specifications ensure that servers do not become overloaded with unexpired jobs. If necessary, you can override job expiration specifications so that the job never expires, or expires after a certain number of minutes.

For example, suppose you schedule a job to run at midnight and another job for 1:00 a.m., but the server goes down and probably will not come back up again before the jobs are scheduled to run. In this case, you can specify that the first job (you scheduled at midnight) will expire in 30 minutes (12:30), so that if the server does not come back up within 30 minutes, the job will expire.

#### To override job expiration specifications

- 1. On the Work With Scheduled Jobs form, choose the job, and then choose Advanced Functions from the Row menu.
- 2. On the Scheduling Advanced Functions form, click the Job Expiration tab.



- 3. Indicate whether you want the job to never expire, or expire after a certain period of time has elapsed.
- 4. Click OK.

Field	Explanation
Job never expires	This field indicates the number of minutes after the scheduled start time that this job expires. Once the job expires, it will not be run.
Job expires after	This field indicates the number of minutes after the scheduled start time that this job expires. Once the job expires, it will not be run.

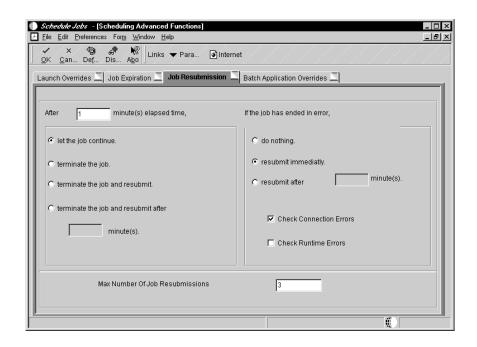
# Defining When the Scheduler Resubmits a Job

You can define when the Scheduler resubmits jobs. This feature is useful if a job ends in error, for example, because the Scheduler will submit the job after a certain period of time.

To help avoid taking up system resources, you can limit the number of times that a job can be resubmitted. You can also have the Scheduler check for connection errors or run-time errors when the job runs. Connection errors occur when the system fails to connect to the server to submit the job. Run-time errors occur when the server on which the job is running places the job in an error state. You can set up the system to monitor for both cases.

## To define when the system resubmits jobs

- 1. On the Work With Scheduled Jobs form, choose the job, and then choose Advanced Functions from the Row menu.
- 2. On Scheduling Advanced Functions, click the Job Resubmission tab.



- 3. Specify the number of minutes that elapse before the job continues or terminates, and then choose one of the following options:
  - Let the job continue
  - Terminate the job
  - Terminate the job and resubmit
- 4. If you want to terminate the job and resubmit it after a certain period of time, choose the following option and enter the number of minutes that you want to elapse before the system resubmits the job:
  - Terminate the job and resubmit after x minute(s)
- 5. Choose one of the following options that apply when the job ends in error:
  - Do nothing
  - Resubmit immediately
  - Resubmit after *x* minute(s)
- 6. Specify whether you want the system to check for connection or run-time errors, or both.
- 7. Specify the maximum number of times that you want the job to be resubmitted.
  - Max Number of Job Resubmissions
- 8. Click OK.

Field	Explanation
let the job continue	Indicates how to handle a job that is in process too long.
terminate the job	Indicates how to handle a job that is in process too long.
terminate the job and resubmit	Indicates how to handle a job that is in process too long.
terminate the job and resubmit after	Indicates how to handle a job that is in process too long.
do nothing	Indicates the method for resubmitting a job if the job has an error status.
resubmit immediatly	Indicates the method for resubmitting a job if the job has an error status.
resubmit after	Indicates the method for resubmitting a job if the job has an error status.
resubmit after	Indicates the method for resubmitting a job if the job has an error status.
Check Connection Errors	Indicates the method for resubmitting a job if the job has an error status.

Field	Explanation
Max Number Of Job Resubmissions	This is the maximum number of times that a job schedule instance can be re-submitted.
	For example, a job is scheduled to be submitted at 12AM on April Second. The scheduler is instructed to re-submit this job if it ever ends in error. However, this field is set to three. That means the job can only be re-submitted three times. The fourth time this job ends in error, the scheduler will no longer submit it.

# **Overriding Batch Application Specifications**

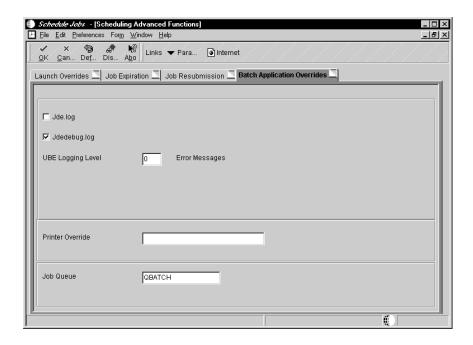
You can specify if you want errors written to the jde.log. If you want errors written to the jdedebug.log, you can set the trace level to determine what types of errors to include in the log.

You can also override the printer at which a report is printed. This feature is useful if a particular printer is down or if you want to print a report to a printer other than the default.

Also, you can override the queue to which the output of a submitted job is sent. If you want to pass parameters to a particular batch job, you can attach a report interconnect through Batch Application Specifications as well.

#### To override batch application specifications

- 1. On the Work With Scheduled Jobs form, choose the job, and then choose Advanced Functions from the Row menu.
- 2. On Scheduling Advanced Functions, click the Batch Application Overrides tab.



- 3. Choose one or more of the following options:
  - jde.log
  - jdedebug.log

If you chose jdedebug.log, you must also choose the jde.log option.

- 4. Complete the following fields:
  - UBE Logging Level

If you chose jdedebug.log, you can set a trace level to log certain levels of errors.

• Printer Override

Enter the name of the printer to which you want to print the report the job generates.

Job Queue

Enter the name of the job queue to which you want the job output sent.

5. Click OK.

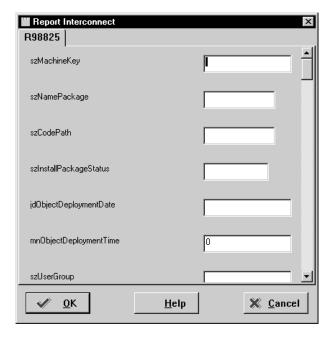
# Adding Values to a Report Interconnect

You can add values to be passed through a report interconnect into a batch process when that batch process is launched. The batch process must first contain a report interconnect.

#### To add values to a report interconnect

- 1. On the Work With Scheduled Jobs form, choose the job and then choose Advanced Functions from the Row menu.
- 2. On Scheduling Advanced Functions, choose Parameters from the Form menu.

The system displays the Report Interconnect form with the parameters for that particular batch process.



- 3. Enter the values that you want to pass to the batch process when the process runs.
- 4. Click OK.

Field	Explanation
Jde.log	When the batch job is run on a server, this field allows you to indicate if JDE logging should be enabled for the execution. If the server is already set to perform JDE logging, it occurs regardless of how this field is set.
Jdedebug.log	When the batch job runs on a server, this field indicates whether tracing is enabled for execution of the job. If the server is already set to perform tracing, it occurs regardless of how this field is set.
Printer Override	The default printer device.
Job Queue	The job queue to which the job was submitted. On the AS/400 this is an actual system job queue. On other systems it is a OneWorld logical queue.

#### See Also

- Creating a Report Interconnection in the OneWorld Development Tools Guide.
- Debug Tracing in the OneWorld Development Tools Guide for information about setting trace levels.

# Working with the Job Schedule

When you schedule a job that includes a recurrence pattern, the system creates a set of schedule records, or instances, for the job in the Job Schedule table (F91320). The Job Schedule table indicates the times and dates that the job will run. You can review these instances and their statuses, and also change the scheduled job information. For example, you can change the location at which you want a job to process, delete a job instance, or override any advanced functions.

**Note:** Because the job schedule table is also used for audit information, you can modify or delete only jobs that have not yet run.

1 8
Reviewing all job schedules
Changing the launch status of a job
Viewing job details
Setting the job status manually
Resetting the job schedule

This chapter describes the following:

# **Reviewing All Job Schedules**

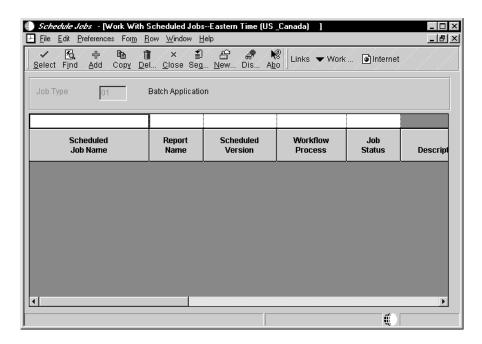
When you review all job schedules, you can view all instances of jobs that have been launched. You can even revise a job by choosing a job instance, and then choosing Revise Job from the Row menu.

See *Revising a Scheduled Job* for more information about revising the job schedule.

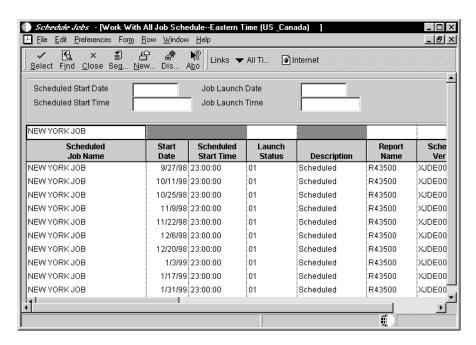
You can filter the job instances that you want to review by launch date, start date, and time. For example, you can review all job instances for today's date by entering that date in the Scheduled Start Date field. Or, you can review all job instances that were launched on a certain date by entering that date in the Job Launch Date field. You can also filter job instances by scheduled job name, launch status, report name, or scheduled version.

# To review all job schedules

1. From the Job Scheduler menu (GH9015), choose Schedule Jobs.



2. On Work With Scheduled Jobs, choose All Schedules from the Form menu. The Work With All Job Schedules form appears.



- 3. On Work with All Job Schedules, do the following:
  - To filter by start date or start time, complete the following fields:

- Scheduled Start Date
- Scheduled Start Time
- To filter by launch date or launch time, complete the following fields:
  - Job Launch Date
  - Job Launch Time
- To filter by job name, launch status, report name, or scheduled version, complete the following fields:
  - Scheduled Job Name
  - Launch Status
  - Report Name
  - Scheduled Version
- To view all scheduled jobs in all time zones, choose All Time Zones from the Form menu.

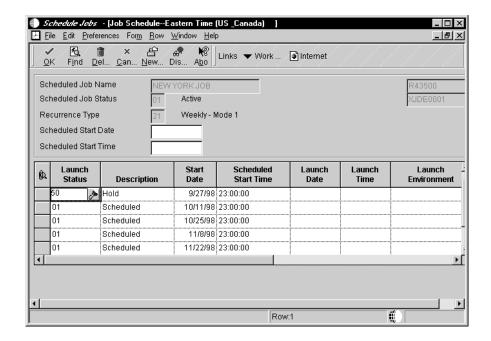
Alternatively, choose Local Time Zone from the Form menu to view all scheduled jobs in the local time zone.

# Changing the Launch Status of a Job

You can change the launch status of a job. For example, you might need to put a job on hold or reschedule a job.

# To change the job launch status of a job

- 1. From the Job Scheduler menu (GH9015), choose Schedule Jobs.
- 2. On Work With Versions, choose the time zone in which the job will run and then click Select. The Work With Scheduled Jobs form appears.
- 3. On Work With Scheduled Jobs, locate the job that you want to change.
- 4. From the Row menu, choose Job Schedule.



5. On Job Schedule, choose the job instance whose launch status you want to change, and then enter a new status in the Launch Status field.

Enter 1 for Scheduled or 50 for Hold.

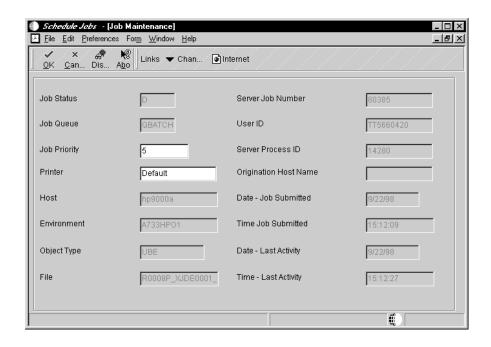
6. Click OK.

# **Viewing Job Details**

You can view details about a job, for example, if you want to review the job queue, the priority in which it will run, the location of the report printer, and other details about the job. From this form you can also change the job priority or the location at which the report will print.

# To view job details

1. On the Job Schedule form, choose the job and then choose View Detail from the Row menu.



- 2. On Job Maintenance, complete the following fields if necessary:
  - Priority
  - Printer
- 3. Click OK.

# **Setting the Job Status Manually**

As a system administrator, you can change the status of jobs if the Scheduler is not updating the launch status, or if the Job Monitor is disabled.

**Note:** If you need to kill a job, choose Work with Servers from the Form menu on the Work with Scheduled Jobs form.

**Caution:** You should secure other users from accessing the Set Status option. Only the OneWorld administrator should have access to this option. For more information about security, see the *Security* section.

# To set the job status manually

- 1. On the Work With Scheduled Jobs form, choose the job and then choose Job Schedule from the Row menu.
- 2. On Job Schedule, choose the job instance for which you want to manually set the job status, and then choose Set Status from the Row menu.



- 3. On Manually Set Job Status, complete the following field and click OK:
  - Scheduled Launch Status

# Resetting the Job Schedule

If you make custom changes to a job's schedule and then change your mind, you can remove those changes and regenerate the job schedule using the previously defined recurrence pattern. The job schedule will be reset to the way that it was before you made custom changes.

# To reset the job schedule

1. From the Job Schedule form, choose Reset Schedule from the Form menu. The following warning message appears:

This will remove any custom changes to this job's schedule and regenerate the schedule using the recurrence pattern. Are you sure you want to continue?

2. Click Yes to confirm resetting the job's schedule.

# **Understanding the Scheduler Server**

The Scheduler server is a process that performs two distinct functions: it launches all jobs at the scheduled times, and it monitors each job's progress and ending state. These functions are started by a JDENET message, as defined in the following kernel type in the jde.ini file:

```
[JDENET_KERNEL_DEF10]
dispatchDLLName=jdekrnl.dll
dispatchDLLFunction=_JDEK_DispatchScheduler@24
maxNumberOfProcesses=1
beginningMsgTypeRange=2001
endingMsgTypeRange=2256
newProcessThresholdRequests=0
numberOfAutoStartProcesses=1
```

The Scheduler launches batch processes in a server/environment/user combination, based on the information in the Job Master table (F91300). After the Scheduler is started, JDENET keeps it in a wait state by calling the Scheduler dispatch function every minute with an idle message. This idle message allows the Scheduler process to check whether it should launch a job or monitor the jobs that are running. In addition, JDENET also sends the Scheduler any message sent from the workstation (for example, messages that the new job schedules have been added).

The following topics explain each of the elements of the Scheduler server:

	Control record
	Dispatch function
	Launch loop
$\Box$	Iob monitor loop

#### **Control Record**

A control record is a job record in the Schedule Job Master table (F91300). It is named \*SCHEDULE and is hidden from the user. The \*SCHEDULE record contains information about the state of the Scheduler processes on the server, and it is the method of communicating to those processes.

OneWorld Xe (09/00) 12–33

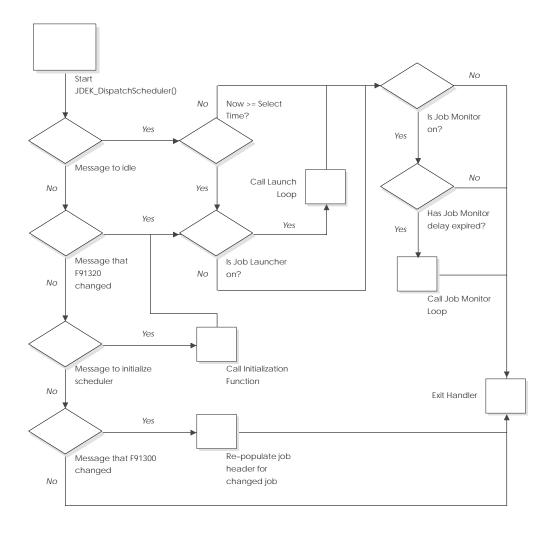
For example, when the launch loop starts on the server it will set a flag in this record to indicate that it is up and running. You can end the launch loop by toggling the corresponding end process flag (such as Job Launcher Status or Job Monitor status) from the Form menu on Scheduler Server Control. The next time that the launch loop fetches the control record, it will find the flag, reset both flags, and end.

If the system does not find the control record when it is fetched, the record is re-created by P91300 when entering the Scheduler Server Control form. In addition, if the record is corrupt, the function above is called to recreate it as well. The sleep times for the job monitor will be reset to 15 minutes and the audit information in this record will be updated with the user ID set to SCHEDULER.

# **Dispatch Function**

The dispatch function handles the incoming message from the workstation and starts the requested process. The JDENet process either sends a message to initialize the Scheduler, signals that the F91320 table has changed, or gives an idle message. The idle message is sent every minute unless one of the other messages is sent. When the idle message is sent, the dispatch function checks to see if the launch loop or job monitor needs to be called. If neither do, then control is given back to JDENet.

The following illustration shows the flow of the dispatch function.

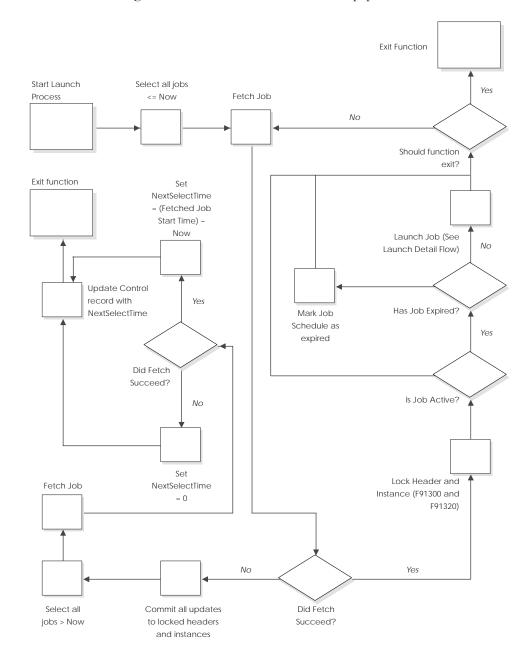


# Launch Loop

The launch loop function selects all the jobs up to the current time. It then loops through the selected records and launches the active jobs if they have not expired. After launching all current jobs, the launch loop fetches all future jobs sorted by start time. If the fetch succeeds, the next select time (NST) will be set to the difference between the current time and the start of the next job. If the fetch fails, the NST will be set to zero, which indicates that this function should be run the next time that any record is added to or updated by the Job Schedule table (F91320). In addition to launching jobs, the launch loop also checks the control record periodically to see if it should exit.

The launch loop also looks for updates of all the schedule instances (F91320 records) and job headers (F91300 records) that it fetches. After the launch loop has processed these records, it then commits any changes and unlocks all of the records.

OneWorld Xe (09/00) 12–35

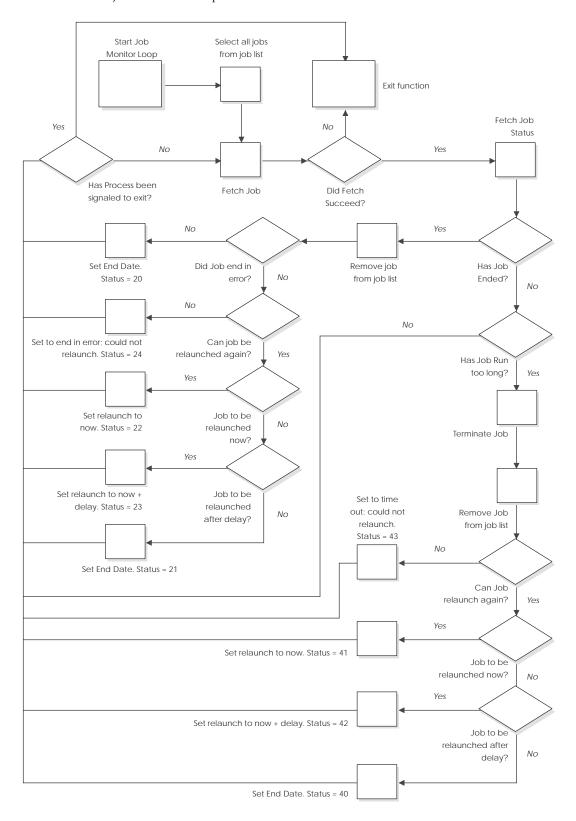


The following illustration shows the launch loop process flow:

# **Job Monitor Loop**

The job monitor loop monitors the ending statuses of the launched jobs and relaunches those that end in error, if requested to do so by the user. This loop cycles through the internal job list that the job launch loop populates. In addition, it terminates jobs that run too long, if requested to do so. A job cannot be relaunched for more times than specified in the job's F91300 record.

Like the launch loop, the job monitor loop periodically fetches the control record to see if it should end. The following illustration shows the process flow of the job monitor loop.



OneWorld Xe (09/00) 12–37

# Working with the Scheduler Server

You can stop, reset, restart, and refresh the Scheduler server. For example, if the server goes offline, it needs to be reset. You can also modify the server and monitor sleep time, specifying how many seconds you want JDENet to wait until it checks to see if it needs to initialize, or "wake up," the Scheduler server.

There may also be times when you need to turn on or off the Job Launcher or Job Monitor, such as situations in which you must take down the servers to which you submit jobs and for which want to avoid unnecessary connection errors when jobs are submitted.

You can also change the jde.ini file to enable the Scheduler to restart automatically by changing the numberOfAutoStartProcesses line. If you enable this feature and the server the Scheduler server is running on comes down, the Scheduler server automatically restarts when the server comes back up, instead of having to be restarted manually. When the Scheduler server restarts, the Scheduler checks the control table (F91320) to determine if it should restart on that particular server. If not, the Scheduler shuts down.

**See Also:** *The jde.ini File* in this guide for more information about the autostart function.

JDENet handles the calls to initialize the Scheduler Server. As explained in *Understanding the Scheduler Server*, the JDENet process either sends a message to initialize the Scheduler to launch a job if it receives a message that the F91320 has changed, or it sends an idle message if no change is detected. For faster response time, you can decrease the number of seconds that you want JDENet to wait until it checks to see if there has been a change to the F91320.

**NOTE:** This application is for OneWorld administrators only. You should secure users from accessing the Scheduler Server application.

**See Also:** For more information about security, see the *Security* section.

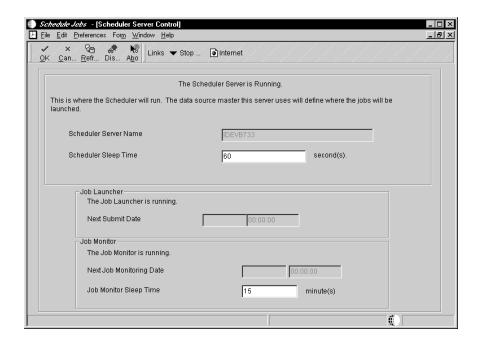
Complete the following tasks:

- Stop or restart the Scheduler server
- Pause the job launcher or job monitor
- Reset the Scheduler server
- Refresh the Scheduler server settings
- Modify the Scheduler server and monitor sleep time



#### To stop or restart the Scheduler server

- 1. From the Job Scheduler menu (GH9015), choose Schedule Jobs (P91300).
- 2. On Work with Versions, choose version which specifies the time zone in which the scheduled jobs run, and then click Select.
- On Work with Scheduled Jobs, choose Scheduler Server from the Form menu.



- 4. On Scheduler Server Control, do one of the following:
  - To stop the server, choose Stop Scheduler from the Form menu.
  - To restart the server, choose Start Scheduler from the Form menu.
- 5. Click OK.



#### To pause the job launcher or job monitor

There might be times when you want to pause the job launcher or job monitor, such as when you want to take down the servers that you submit jobs to and want to avoid server connection errors that might occur while those servers are down.

When you pause the job launcher, the Scheduler stops looking at the F91320 table for jobs to launch. When you pause the job monitor, the Scheduler stops monitoring the status of launched jobs.

1. On Scheduler Server Control, choose Pause Job Launcher from the Form menu to pause the job launcher.

- 2. To pause the job monitor, choose Pause Job Monitor from the Form menu.
- 3. Click OK.

### To reset the Scheduler server

You reset the Scheduler server after you change the status of the Job Monitor or Job Launcher. For example, if you change the status of the Job Monitor, you would choose Reset to refresh the settings on the server.

- 1. On Scheduler Server Control, choose Reset from the Form menu.
- 2. Click OK.

# To refresh the Scheduler server settings

When you refresh the Scheduler server settings, the server refreshes its cache of launched jobs and closes and restarts all environment and table handles. That is, it is a kind of internal refresh of the server's internal structures. You might want to refresh the Scheduler server settings if you had to restart the server.

- 1. On Scheduler Server Control, choose Refresh from the Form menu.
- 2. Click OK.

# To modify the Scheduler server and monitor sleep time

Sleep time is the time that the Scheduler server or monitor is idle.

- 1. On Scheduler Server Control, complete the following fields as necessary:
  - Scheduler Sleep Time
  - Job Monitor Sleep Time
- 2. Click OK.

Field	Explanation
Scheduler Sleep Time	This field indicates the number of seconds the scheduler server will sleep (or idle). For example, if this field was set to 60 seconds, the Scheduler Server will wake up every 60 seconds to check to see if it needs to launch or monitor jobs. The default is 60 and it must be greater than zero.
Job Monitor Sleep Time	This field indicates the number of minutes the job monitor will pause between job status checks.

# **Modifying Daylight Savings Rules**

Daylight savings rules tell the system how each locale implements its daylight savings time. The Scheduler uses these rules along with the time zone information to determine when jobs should be run on a particular server.

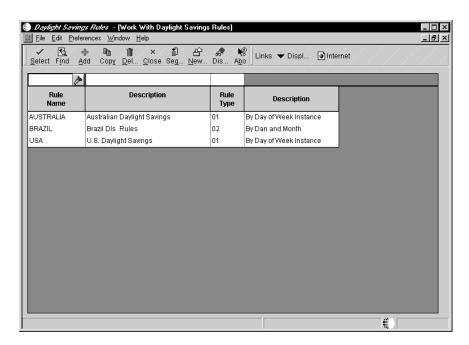
You can add a new daylight savings rule or modify an existing one.

Complete the following tasks:

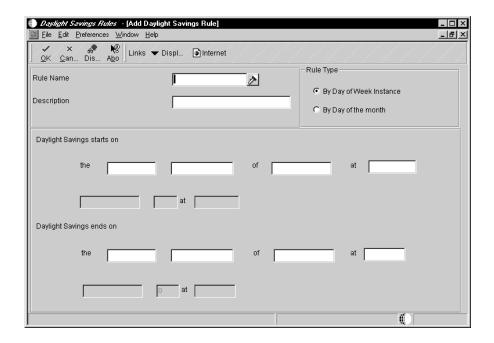
- Add a new daylight savings rule
- Modify an existing daylight savings rule

# To add a new daylight savings rule

1. From the Job Scheduler menu (GH9015), choose Daylight Savings Rules (P00085).



2. On Work with Daylight Savings Rules, click Add.



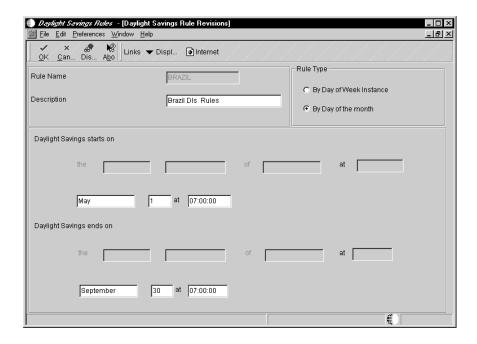
- 3. On Add Daylight Savings Rule, complete the following fields:
  - Rule Name
  - Description
- 4. Choose one of the following rule types:
  - By Day of Week Instance
  - By Day of the month
- 5. Enter the dates that daylight savings time begins and ends, and then click OK.

Field	Explanation
Rule Name	Unique name identifying a daylight savings rule. Daylight savings rules to adjust time for a geographic and political locale.
Description	A description, remark, name, or address.
By Day of Week Instance	A code that indicates the method that is used to determine a daylight savings rule.
	By Day of Week Instance indicates that daylight savings will start and stop on a certain day of the week for a certain month, such as the first Sunday of April to the first Sunday of October
	By Day and Month indicates that daylight savings will start and stop on a certain day of a certain month, such as April 3 to October 10

Field	Explanation
By Day of the month	A code that indicates the method that is used to determine a daylight savings rule.
	By Day of Week Instance indicates that daylight savings will start and stop on a certain day of the week for a certain month, such as the first Sunday of April to the first Sunday of October
	By Day and Month indicates that daylight savings will start and stop on a certain day of a certain month, such as April 3 to October 10

#### To modify an existing daylight savings rule

- 1. From the Job Scheduler menu (GH9015), choose Daylight Savings Rules (P00085).
- 2. Choose the rule that you want to modify, and then click Select.



- 3. On Daylight Savings Rule Revisions, add a new description, if necessary, in the description field:
  - Description
- 4. Choose one of the following rule types:
  - By Day of Week Instance
  - By Day of the month
- 5. Modify the dates and times that daylight savings time begins and ends, and then click OK.

# **Running Scheduler Reports**

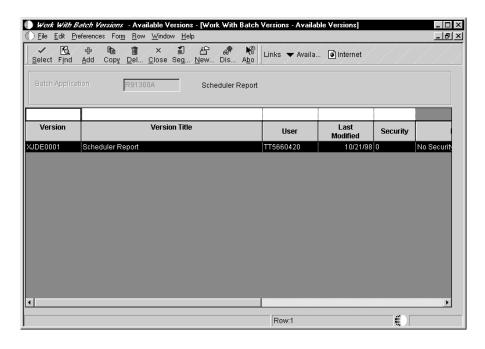
Run the Scheduled Jobs report when you want to review a summary of scheduled jobs and their status. You can use processing options to specify whether to run this report based on Universal Coordinated Time or local time. You can also adjust for daylight savings time.

If you want to purge records from the Job Schedule table (F91320), run the Scheduler Purge program. You can run the purge program in proof mode and final mode.

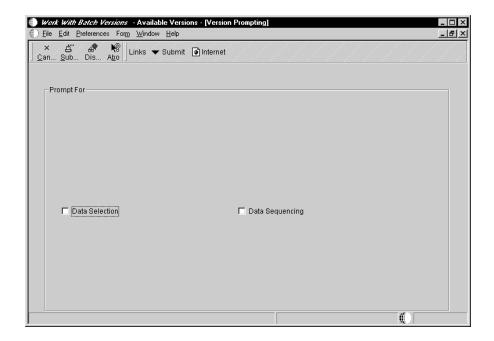
The following task describes how to run these reports. The procedure is the same regardless of which report you run.

## To print the Scheduled Jobs or Purge Scheduled Jobs report

1. From the Job Scheduler menu (GH9015), choose Print Scheduled Jobs (R91300A) or Purge Scheduled Jobs (R91300B).



2. On the Work With Batch Versions form, choose a version in the detail area, and then click Select.



- 3. On Version Prompting, choose any of the following options, if necessary, and then click the Submit button:
  - Data Selection
  - Data Sequencing
- 4. On Report Output Destination, choose one of the following options, and then click OK:
  - On Screen
  - To Printer

#### See Also

• Submitting a Report in the Enterprise Report Writing Guide.

# Media Objects and Imaging

OneWorld's media objects and imaging features allow you to attach useful information to an application, including information that might currently exist as a paper-based document. The media objects feature allows you to attach the information to OneWorld applications, forms and rows, and Object Librarian objects. The imaging feature, within media objects, gives you flexibility to create a more efficient method of information storage.

### What Are Media Objects?

Use media objects to link information to applications, either to individual rows in a detail area or to a form. The following list describes the types of information that you can attach to a grid row or a form:

**Text** Media Objects provides a word processor that lets you

create a text-only attachment. For example, you could use a text attachment to provide specific instructions for a

form or additional information about a record.

Image Images include files such as Windows bitmaps, Graphics

Interchange Format (GIF) files, and Joint Photographic Experts Group (JPG) files. These files might represent electronically created files as well as scanned images of

paper-based documents.

Object Linking and Embedding (OLE)

Media objects can be files that conform to the OLE standard. OLE allows you to create links between different programs. Using these links, you can create and edit an object from one program in a different program. OneWorld provides the links that you need to attach OLE

objects.

You attach OLE media objects at the base form level. Media objects attached at this level are attached to a form and not to any data that might appear in the form. You can attach media objects to a detail area or a form, but the files themselves exist in separate directories. The only file information included with the application to which the OLE object links is the path to the supporting file.

You can only use OLE objects that you properly register and install as OLE objects through OneWorld.

**JDE Shortcuts** A JDE shortcut is a link that opens a OneWorld

application. Within media objects, you can only attach OneWorld shortcuts, that is, you cannot attach Windows

shortcuts to media objects.

**Uniform Resource Locations (URL)/Files**  Media objects can be links to web-page URLs or other related files. When a developer attaches a URL media object to a control object on a form, the web page appears as part of the form. When a user attaches a URL to a form or Object Librarian object, the media object acts as a link to the URL.

System administrators can also set up templates. A template might include attachments of its own, such as images and shortcuts. For example, you can create a letterhead and a standard form for a memo. Also, you might create a shortcut in the template to provide access to an application that uses data specific to the information that you add to the template.

**See Also:** The *OneWorld Development Tools Guide* for information on creating attachment templates.

### What Is Imaging?

The imaging capabilities available in OneWorld allow you to link to a third-party imaging product. Imaging systems allow you to scan and electronically store paper-based information. For example, this information might include documents such as sales orders, purchase orders, vendor invoices, and product schematics. OneWorld imaging integration includes a Media Objects viewer and a third-party product that provides scanning and searching interfaces to allow you to find and display images. OneWorld's implementation of imaging also provides a view of integrated images using the viewer of the native imaging product.

Complete the following tasks:
☐ Enabling OneWorld to use media objects
☐ Working with media object queues
☐ Setting up imaging

# **Enabling OneWorld to Use Media Objects**

To use media objects, OneWorld requires a set of event rules to process the media objects. This processing includes:

- Tracking where the media object files are stored
- Tracking which media objects are attached to which OneWorld objects (rows, forms, and reports)
- Indicating which OneWorld objects have attachments
- Creating or viewing attachments

OneWorld provides standard processing for media objects, which allows you to bypass all event rules that are required to implement media objects. All of the required information is gathered from a form in Form Design Aid and does not require you to define any event rules. Standard processing does the following:

- Standardizes the usage of media objects across forms
- For any detail area, places a paper clip icon on the row header if a media object is defined for that row
- For a form, places an icon in the status bar if a media object is defined for the form
- Allows you to attach documents to the form or to a row in the detail area
- Allows you to double-click on the paper clip in a row to view media objects for that row
- Allows you to click on the paper clip in the status bar to view media objects for the form

If you choose not to use standard processing for a form, you can still develop your own system for handling media objects by using existing event rules or event rules that you develop.

OneWorld uses the Media Objects Storage table (F00165) to store link records for media objects and imaging. You must define your media object data structure using a unique key structure so that the Media Objects Storage table can store data correctly. The layout of this table is as follows:

GT | F4211Keys | The media object text

GT (generic text) is the naming convention used when defining a media object data structure. The F4211Keys portion is what the system uses to access the unique media object attachment for that particular record. The keys typically match what the unique key would be in the F4211 table for each detail line. The media object text portion is the actual text attachment that stores information typed in by the user.

Furthermore, in addition to the media object categories provided by OneWorld, you can define up to 40 more. Users can associate these categories with a media object to group certain media objects and to enable other users to search for specific media objects. User-defined categories reside in the Media Object Categories table (F00166) and are referenced via each object's unique key. The default titles for these categories are Category Codes 1-30, Dates 1-5, and Numeric 1-5.

### Before You Begin

To see the media object paper clip	column on a form, turn off the Hide
Row Headers option on the Grid p	properties for the form.

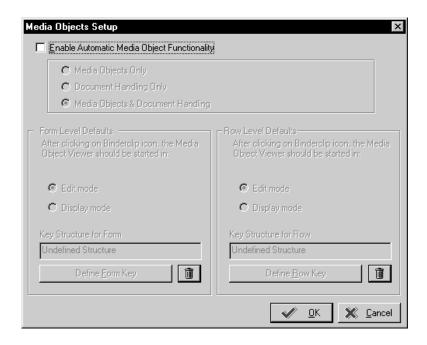
### **Enabling OneWorld to use media objects**

Use this procedure to create new forms to enable processing for media objects, or to change an existing form that is not currently enabled.

- 1. From Form Design Aid, right-click in the grid portion of an existing or newly created form and choose Properties.
- 2. On Grid Properties, turn off the Hide Row Headers option.

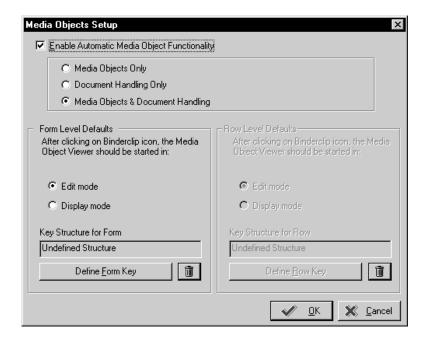
This enables you to see the media object paper clip column on a form.

3. From the form menu, choose Media Objects Setup.



4. Click the Enable Automatic Media Object Functionality option.

This enables imaging and activates the other fields on the form.



- 5. On Media Objects Setup, click one of the following:
  - Media Objects Only

Use the Media Objects Only option if you do not want to interface with third-party products including imaging. If you choose this

option, you will only be able to use media objects that are defined for and supported from within OneWorld.

Document Handling Only

Use the Document Handling Only option if you are developing a form that is enabled for media objects via functionality in event rules, and you want to bypass standard processing.

Media Objects & Document Handling

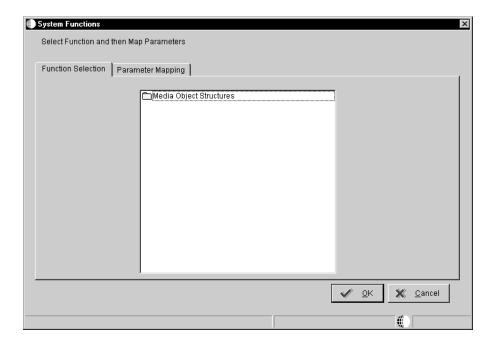
If you want to enable standard processing later, you must delete all of the event rules for media objects and choose the Media Objects & Document Handling option.

6. Click Edit mode or Display mode.

Edit mode allows the user to make changes; display mode is read-only.

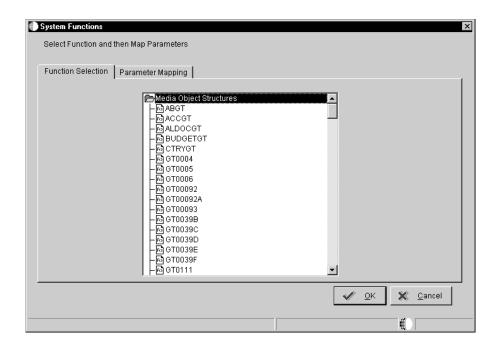
7. Click Define Form Key.

The System Functions form appears. This form is identical to the parameter definition form used to define system functions in Event Rules, except that only the Media Object Structures header is displayed.



8. Double-click the Media Object Structures folder.

A list of all of the currently defined data structures for Media Objects appears.



9. Select the appropriate structure and define it as described in the *OneWorld Development Tools Guide*.

# Working with Media Object Queues

OneWorld media object queues allow the storage location of media objects to be tracked by reference as opposed to physical network location. This allows for easy administration of media location. For example, the location for media objects on your server can change, and the change only has to be reflected in one place in OneWorld.

You must define a media object queue to identify the pointer to the location where the actual image files or OLE objects reside. Media object queues provide the system administrator with the ability to easily manage the storage of media objects in OneWorld. Within OneWorld, you must set up media object queues to use images that are outside of the imaging product's domain (for example, scanned images). You can set up media object queues for the following types of objects:

- Image objects (actual files)
- OLE objects (links to files)
- URLs (Internet addresses)

This chapter discusses the following topics related to media objects:

Image media objects
OLE media objects
URL media objects
Media objects tables
OneWorld text items

# **Image Media Objects**

Image media objects are individual files that are accessed and viewed using a third-party imaging product. These objects are stored in locations defined with a name and a network-qualified path. For example, if all of the images for financial applications are stored in a directory on the network called \\server1\financials\images, an image media object queue could be defined as follows:

OneWorld Xe (09/00) 13–9

• Path: \\server1\financials\images

• Name: FIN IMAGES.BMP

# **OLE Media Objects**

OLE media objects are individual objects that are created and viewed using a OLE-compliant application outside of OneWorld. In OneWorld, the OLE object attached to a row or form is actually a link to the OLE object that resides in a media object queue. The distinction between OLE objects and non-OLE objects is important because, other than graphics files, you cannot attach non-OLE objects from OneWorld if they are not compliant. Examples of valid OLE objects are Microsoft Windows OLE-compliant applications such as Word, Excel, Powerpoint, and Visio. Other examples might include sound or video files (.wav or .avi extensions).

# **URL Media Objects**

URL media objects are Internet addresses that point to Web sites that are identified by industry-standard uniform resource locations (URLs). When defined in the media object table, these addresses can be connected to Internet locations.

# **Media Object Tables**

Media object queues typically represent network directory locations for OneWorld media object files, such as OLE objects and images. The two media object tables are Media Object Queues (F98MOQUE) and Imaging Constants (F98101).

The media object queues are stored in the Media Object Queues table which, along with the Imaging Constants table, should be located in the system data source. The Media Object Queues table contains the associated key value of the data record to which the media object is attached, the image reference, and the OLE reference. The image reference and the OLE reference are queue names. The queue name is used to access the Media Object Queue table for the location of the OLE object or image.

Media object keys are stored in the Media Objects Storage table (F00165). Media object characterization properties are stored in the Media Object Categories table (F00166). The Media Object Category Constant table (F00167) stores information indicating which categories the system activates for any given data structure.

### **OneWorld Text Items**

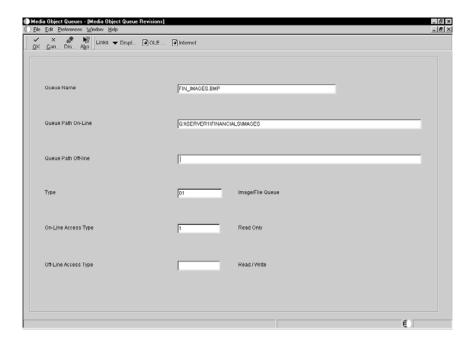
Text items are items that you create using the OneWorld media objects word processor. They do not require Media Object Queues. The Media Objects Storage table (F00165) contains both the associated key value of the data record to which the text media object is attached, and the text itself. Text items that originate from applications external to OneWorld (for example, Microsoft Word or Wordpad) must be stored as OLE objects.

Working with media object queues includes the following tasks:

- Adding a media object queue
- Defining the location of a media object queue
- Deleting a media object queue

### To add a media object queue

- 1. On System Administration Tools (GH9011), choose Media Object Queues (P98MOQUE).
- 2. Click Add.



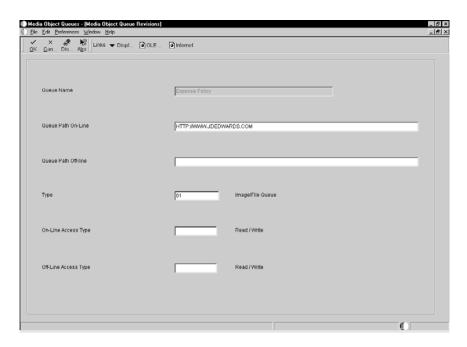
- 3. On the Media Object Queues form, complete the following fields:
  - Queue Name
  - Queue Path On-Line
  - Queue Path Off-line

- Type
- On-Line Access Type
- Off-Line Access Type

Field	Explanation	
Queue Name	Identifies the name of a queue for a media object. The queue name is the first half of a properly defined queue for a media object. The queue path is the second half of the queue for a media object.	
	OLEQUE is a reserved queue name for OneWorld media objects. You must use this name as the default queue name in the OLE object attachment mode of Media Objects. It is mandatory that this queue name be defined to use OLE object attachments.	
	The queue path and queue name are stored in the F98MOQUE table. Object Configuration Manager controls the location of this table. The system reads the F98MOQUE table to determine name of the queue and the location of the associated OLE objects, images, or URLs.	
Queue Path On-Line	Identifies a network or local path that points to the location of OLE objects, images, or URLs. The queue path is the second half of a properly defined queue for a media object. The first half is the name of the media object. A valid queue path for a network location might be: \\server1\share3\images\financial.	
	The queue path and queue name are stored in the F98MOQUE table. Object Configuration Manager controls the location of this table. The system reads the F98MOQUE table to determine name of the queue and the location of the associated OLE objects, images, or URLs.	
Queue Path Off-line	Identifies the local path that points to the location of OLE objects, images, or URLs. The queue path is the second half of a properly defined queue for a media object. The first half is the name of the media object. A valid queue path when working off-line might be d:\data\media\images.	
	The queue path and queue name are stored in the F98MOQUE table. Object Configuration Manager controls the location of this table. The system reads the F98MOQUE table to determine name of the queue and the location of the associated OLE objects, images, or URLs.	

# To define the location of a media object queue

- 1. On System Administration Tools (GH9011), choose Media Object Queues (P98MOQUE).
- 2. If an OLE queue does not exist, click Add.
- 3. Complete the following fields:
  - Queue Name
  - Queue Path On-Line
  - Queue Path Off-line
  - Type
  - On-Line Access Type
  - Off-Line Access Type
- 4. If you want to change an existing media object queue, click Find to display a list of queue names and their paths.
- 5. Choose the queue name that you want to modify and click Select.



6. Change the information in the Path field to reflect the new location and click OK.

# To delete a media object queue

1. On System Administration Tools (GH9011), choose Media Object Queues (P98MOQUE).

- 2. Choose the queue name that you want to delete and click Select.
- 3. From the Form menu, choose Delete.

Deleting a media object queue deletes only the definition of the queue, not the associated path or objects themselves.

# **Setting Up Imaging**

One way to attach images to OneWorld forms and grid rows is to use the Image function of the Media Object feature. However, this solution is not designed for use with sophisticated document handling systems. See the J.D. Edwards web site for a complete list of imaging vendors partnered with J.D. Edwards.

OneWorld uses the OLE client/server model to interface with third-party document handling systems, including the OLE client interface and the OLE server. For the currently supported imaging systems, OneWorld meets these minimum design goal tasks:

- Search. The search mechanism locates a document stored in an indexing system of a document handling system. The search mechanism navigates the storage structures of the document handling system so that the user can easily find a particular document or set of documents.
- Link. Upon a successful search operation, the link mechanism returns the unique document identifier to OneWorld. This identifier is stored with the transaction.
- View. The view mechanism passes the unique document identifier to a document viewing mechanism so that the user can view the document.

Customers with requirements for third-party imaging systems other than those that OneWorld currently supports can design custom OLE automation servers for interfacing purposes. The OLE server can be written in any OLE-compliant language. J.D. Edwards has a published set of APIs to enable you to develop compatible middleware applications. The published APIs are described in a Windows help file that is installed with OneWorld.

This chapter discusses the following topics related to imaging:

Understanding flow for imaging systems

Enabling media objects

# **Understanding Flow for Imaging Systems**

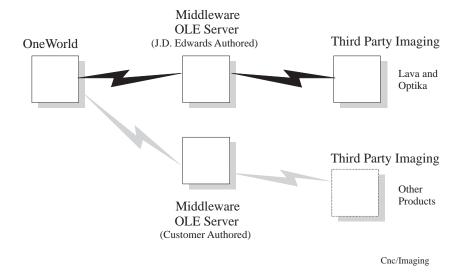
You can use imaging with a document handling system. With this system, you can automatically scan and catalog documents. The system indexes the images so that you can recall them based on certain sets of criteria. For example, you might index images according to type, department, and date. You can recall,

view, and analyze an image at any given time. For example, in a transaction entry scenario, you might scan a paper-based file when the document enters the mail room so that a data entry clerk can retrieve the image to use as a source document.

OneWorld has the ability to retrieve and view documents based, on selection criteria that a user defines. A linking system ties the OneWorld transaction to the document for later retrieval and reference. You can attach a OneWorld transaction identifier with the scanned image in the document handling system to allow a user to directly access an application from the image.

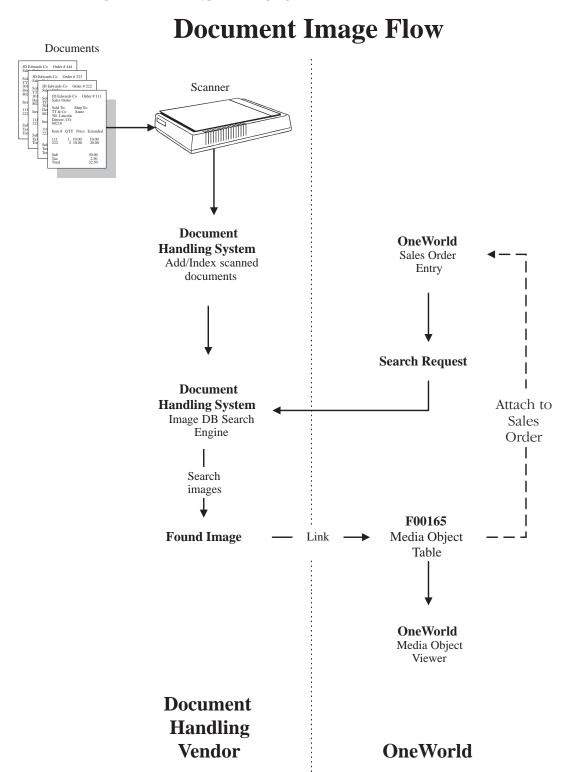
You set up imaging by enabling the imaging at the system level. For an imaging system to be enabled, it must have a registration record in the Imaging Constants table (F98101).

The illustration below shows how OneWorld supports third-party imaging products through a middleware OLE server layer. Customers can also create their own OLE servers to support additional imaging systems.



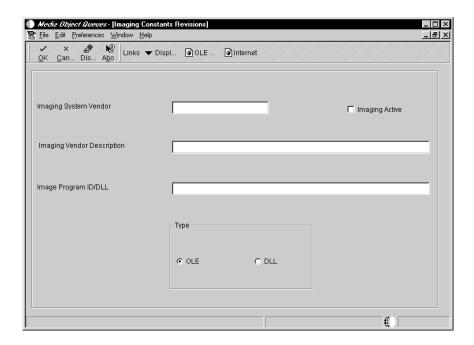
### **Imaging Process Flow**

This diagram shows a typical imaging scenario:



### To enable media objects

- 1. On System Administration Tools (GH9011), choose Media Object Queues (P98MOQUE).
- 2. On Work With Media Object Queues, from the Form menu, choose Imaging.



- 3. On Imaging Constants Revisions, complete the following fields:
  - Imaging System Vendor
  - Imaging Vendor Description
  - Image Program ID/DLL
  - Imaging Active
- 4. Click the following option:
  - OLE

Field	Explanation
Imaging System Vendor	The name of the imaging system vendor you are using on your system.
Imaging Vendor Description	The description of the imaging system vendor you are using on your system.
Image Program ID/DLL	If the image type is an OLE, enter the Program ID that will be used to uniquely identify the imaging system in the system registry. If the image type is a DLL, enter the imaging system DLL name.

Field	Explanation	
Imaging Active	Indicates whether an imaging sytem is currently active for the system.	
OLE	Indicates the type of interface used by the imaging system.  OLE Use the OLE type for 16-bit imaging systems.  These systems typically use an OLE server with an executable (.exe) or library (.dll) file type.  The OLE server must conform to the interface defined by the OneWorld published API.  DLL Use the DLL type for 32-bit imaging systems.	

# **Universal Table Browser**

If you want to view the data in tables in different databases, you can use OneWorld's Universal Table Browser. This tool lets you verify the existence of data in a table as well as determine the table's structure. The Universal Table Browser uses JDEBASE APIs to retrieve data from the database, making it independent of the database that you access.

This section contains the following:	
Viewing the data in tables	

# Viewing the Data in Tables

If you want to view the data in tables in different databases, you can use OneWorld's Universal Table Browser. This tool lets you verify the existence of data in a table as well as determine the table's structure. The Universal Table Browser uses JDEBASE APIs to retrieve data from the database, making it independent of the database you access.

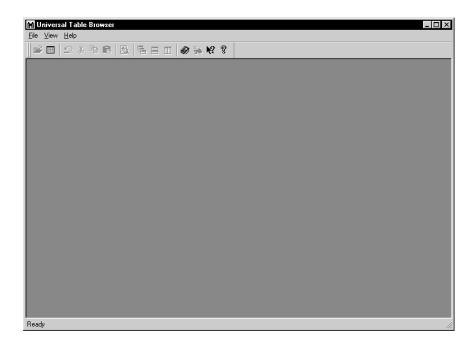
**Note:** All column and row security that you set up through Security Workbench applies to the Universal Table Browser. See *Working With Security Workbench*.

Complete the following tasks:

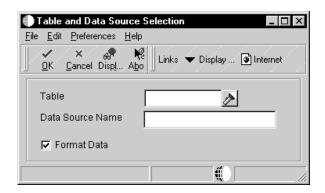
- View the data in tables
- View column properties in a table

### To view the data in tables

1. On Cross Application Development Tools (GH902), choose Universal Table Browser.



2. On Universal Table Brower, choose Open Table from the File menu.



- 3. Complete the following required fields:
  - Table
  - Data Source Name
- 4. Click the following option:
  - Format Data

The Query By Example (QBE) function is operable as in any other OneWorld application. For example, you can enter ">50" in the ABAN8 column QBE to display records with an Address Book Number greater than 50. You could also enter "F\*" in the ABALPH column QBE to display records with an Alpha Name that begins with the letter F.

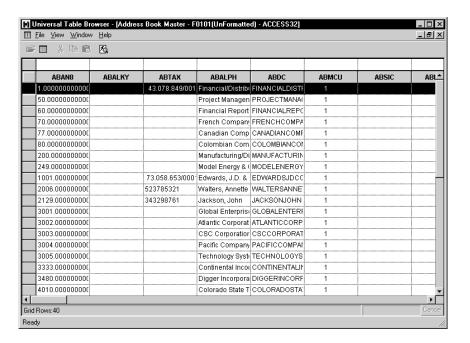
The column sequence and column width functions are operable as in any other OneWorld application. You can rearrange the columns. For example, you might want to move a column that you use often from the end to the front, or move a column next to an associated column. You can also size the columns.

Field	Explanation	
Data Source Name	A valid data source in which the table resides. This default value is obtained from the OCM settings in the environment to which the user is signed on. Use the visual assist to enable the data search form and select any OneWorld data source.	

Field	Explanation
Format Data	Indicates whether you want the Universal Table Browser to format portions of the data (default) or whether you want to view raw data.
	Formatted. The Universal Table Browser displays the data according to the specifications of the OneWorld data dictionary item. For example, assume that the data item PROC is a numeric field of size 15, with 4 display decimals. For a value of 56.2185, the Universal Table Browser displays a formatted value (using the data dictionary editing) as 56.2185, even though this value is stored in the database as 562185.
	Nonformatted. The Universal Table Browser displays the data according to the specification of the database and the data item type (such as numeric) from which the data came. For example, assume the table data item, PROC, is a numeric field stored in the database. Depending on the database, this field might default to a size of 32 with a precision of 15 being a numeric data type. Because OneWorld does not store the decimals in the database, a value 56.2185 would be stored and displayed in the database as 562185.0000000000000000.

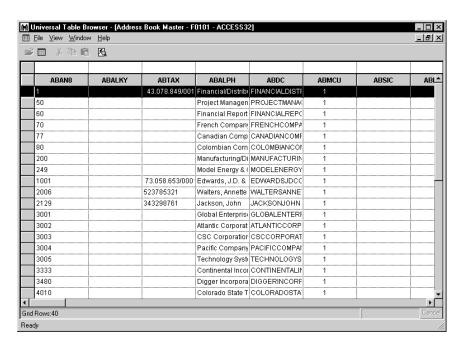
# **Example: Universal Table Browser (Unformatted Data)**

In the example below, a database table is shown as if it were opened with the Format Data option turned off. Notice the structure of the information in the ABAN8 column of table F0101 that is not formatted and is shown exactly as it is stored in the database.



# **Example: Universal Table Browser (Formatted Data)**

In the example below, a database table is shown as if it were opened with the Format Data option turned on. Notice that the structure of the information in the ABAN8 column of table F0101 is formatted using the data dictionary specifications.



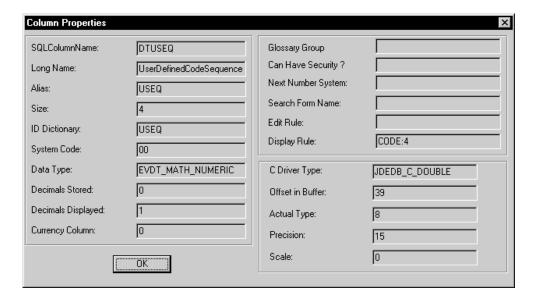
# To view column properties in a table

- 1. On Universal Table Browser, view a table as described in the task, *Viewing the data in tables.*
- 2. Right-click on a desired column and choose Column Properties.

If you are viewing a formatted table, the data dictionary properties are displayed in the upper-right portion of the Column Properties form. If you are viewing an unformatted table, the data dictionary properties are not displayed.

# **Example: Column Properties**

In this example, the column properties are shown for the OneWorld data dictionary item USEQ. The SQL database name for this OneWorld item is DTUSEQ.



# **OneWorld Naming Conventions**

The following list provides information about the naming conventions J.D. Edwards suggests that you use when you set up your configuration. You should use alphanumeric characters for your names. Depending on your server platform, some characters might not be allowed.

Path codes	
Data sources	
Package names	
Server names	
Workstation names	

### **Path Codes**

The naming conventions for a path code are as follows:

- Limited to 10 characters.
- Letters must be uppercase only.

### **Data Sources**

The naming conventions for a data source are as follows:

- Limited to 30 characters
- Case sensitive
- Space sensitive

Specific exceptions for the Client Access data source are as follows:

#### **Data Source Name:**

- Limited to 32 characters.
- Must begin with an alphabetic character.
- You cannot use the following characters:

- {}
- []
- ()
- •
- \*
- =
- •
- @
- ;

**Note:** You must type the data source name before you can use the Client Access ODBC driver to access AS/400 data.

#### **Data Source Description:**

• Limited to 80 characters

# **Package Names**

The naming conventions for a package are as follows:

- Limited to 10 characters
- Uppercase only
- You cannot use the following characters: /\:\*?"<>|

### **Server Names**

The naming conventions for a server depend on the specific platform. For example, an HP9000 and an AS/400 allow you to enter different characters when you define the server name. OneWorld also limits the amount of characters you can use to name a server to 15 characters, regardless of the platform.

### **Workstation Names**

The naming conventions for a workstation are as follows:

- Limited to 15 characters
- Each workstation requires a unique name

• When you add a workstation to a Windows NT Server domain, you must use the name created for the computer by the network administrator

If the workstation name does not have a computer account in the domain, you cannot sign on to the domain or access any domain user accounts.

# The jde.ini File

This section provides a listing of the settings within the jde.ini file (on the AS/400, it is known as the INI file).

The jde.ini file is an initialization file that provides runtime settings for OneWorld. Specific versions of the file must reside on every OneWorld workstation and enterprise server in the installation.

The jde.ini is divided into sections with informational headings. Each section heading is enclosed in square brackets such as [JDENET]. Each section contains one or more keys. The key name is on the left side of the "=" sign; the value of the key is on the right side.

The jde.ini file can be accessed three ways:

- Access Windows Explorer, locate the jde.ini file and double-click on it to open it. Notepad is used to view the file.
- Use the Windows Start button and choose Run from the list of options. Type jde.ini in the Open field.
- Type jde.ini in the Fast Path of OneWorld Explorer.

This section consists of the following tasks:

Understanding workstation jde.ini settings
Understanding AS/400 server JDE.INI settings
Understanding UNIX server jde.ini settings (HP9000, RS/6000, or Sun servers) $$
Understanding Windows NT Enterprise server jde.ini settings
Understanding server jde.ini settings for WebSphere
Understanding Java Server jas.ini settings

#### How to use this section

To enable you to quickly locate descriptions, the sections, such as [CLUSTER], are alphabetized. The settings within the sections are presented in the order in which they appear in the jde.ini file.

# Locating the jde.ini File

You can locate the jde.ini file (INI file for AS/400) in various places, depending on your OneWorld platform.

- For workstations, see *Working with the Workstation jde.log* in *Troubleshooting the Workstation* in the *Server and Workstation Administration Guide*.
- For enterprise servers, see *Working with the Enterprise Server jde.log* in *Troubleshooting the Enterprise Server* in the *Server and Workstation Administration Guide*.

# **Understanding Workstation jde.ini Settings**

This section describes in detail the settings found in the client-side OneWorld workstation jde.ini file. Information is organized by section, for example [DEBUG]. Sections are alphabetized, but settings found within sections are listed in the order in which they are found in the software.

The jde.ini file is located in the default Windows directory of the workstation. This directory might have various names, depending on the type of operating system being used. If you are using Windows NT, the default directory might be called "Winnt40." If you are using Windows 95, the directory might be called "Windows."

### [DB SYSTEM SETTINGS]

The settings in this section contain information about the default environment and path code. A directory must reside on the workstation that has the same name as the default path code shown in its jde.ini file. The name of the server can also be found in this section.

Setting	Value	Purpose
Version=	43	A version number to prevent mismatch of jde.ini file with running version of OneWorld.
Default User=	JDE	The user account name for the database bootstrap tables.
Default Env=	A733CLA	The default environment on the workstation or the enterprise server.
Default PathCode=	PROD	The name of a subdirectory under \b7 that OneWorld uses to find specifications to dispay signon information before an environment is selected.
Base Datasource=	Access 32	The data source representing the database from which logon information is retrieved.
Object Owner=	object/owner	The owner of the system database tables.
Server=	server name	The server on which database resides
Database=	Access 32	The name of the database in which the system tables reside.

Setting	Value	Purpose
Load Library=	JDBODBC.DLL (non-Oracle), (default) JDBOCI73.DLL (Oracle only), JDBOCI80.DLL (Oracle only)	The JDE driver used to access the database that stores the system tables. This depends on the database to be used and the type of system running OneWorld.
Decimal Shift=	N (default) or Y	A flag to indicate if decimal shifting is used for numeric data.
Julian Dates=	N (default) or Y	A flag to indicate if dates are stored in Julian or database-specific format.
Use Owner=	N (default) or Y	A flag to indicate that table names are to be qualified by owner.
Secured=	N (default) or Y	Indicates whether this is a secured database requiring a user and password login.
Type=	A (default), O, S, I	A single character denoting the type of database holding the system tables. These can be O (Oracle), A (MS Access), S (SQL Server), or I (Client Access, AS/400).
LibraryList=		AS/400 only. The database server that stores the system tables.
Default Pwd=		The default password.
Default Journal=	OW_JRNL	AS/400 only. The name of the default journal. Journaling is required on the AS/400 for rollback recovery. There are two components to journaling: the journal and the journal receiver. Both before and after images of a database transaction can be recorded by journaling. This can be set to any character string, 10 characters or fewer.
Default Journal LIBRARY=	journal library	AS/400 only. The library name where the journal is stored. This can be set to any valid library name. The library name changes for each release.
Default Journal Receiver	OW_JRNL000	AS/400 only. The name of the journal receiver. This can be set to any character string, 10 characters or fewer.
Default Journal Receiver LIBRARY=	journal library	AS/400 only. The library name where the journal receiver is stored. This can be set to any valid library name. The library name changes for each release.
Size of Journal Receiver=		AS/400 only.

### [DB SYSTEM SETTINGS - SECONDARY]

This section is used for workstations only. The settings are used for a secondary data source to start OneWorld, should the primary data source be unavailable. These settings should be the same as the values in the Data Source Master table (F98611) for the secondary data source.

Setting	Typical Value	Purpose
Base Datasource=	Access32	The data source representing the database from which logon information is retrieved.
Object Owner=		The database owner of the system tables.
Server=	server name	The server on which the database that stores the system tables resides.
Database=	Access32	The name of the database that stores the system tables.
Load Library=	JDBODBC.DLL (default)	The JDE driver used to access the database holding the system tables.
Decimal Shift =	N (default) or Y	A flag to indicate if decimal shifting is used for numeric data.
Julian Dates=	N (default) or Y	A flag to indicate if dates are stored in Julian or database-specific formats.
Use Owner=	N (default) or Y	A flag to indicate that table names are to be qualified by owner.
Secured=	N (default) or Y	A flag to indicate whether or not this is a secured database requiring user and password login.
Type=	A (default), O, S, or I	A single character denoting the type of database that stores the system tables. These can be: O (Oracle), A (MS Access), S (SQL Server), or I (Client Access, AS/400).
Library List=		AS/400 only. Database server that stores the system tables
Library=		AS/400 only. Database library that stores the system tables.

### [OFFLINE DB SYSTEM SETTINGS]

The settings in this section are used only for running OneWorld in detached mode. If you have not installed your workstation with the detached mode option, this section will not appear in your workstation JDE.INI file. The settings here are the same as in the section [DB SYSTEM SETTINGS] listed earlier in this chapter, although the values are different as shown below.

Setting	Value	Purpose
Version=	43	A version number to prevent mismatch of the jde.ini file with the running version of OneWorld.
Default User=	JDE	The user account name for the database bootstrap tables.

Setting	Value	Purpose	
Default Env=	DEMOB73	The default environment on the workstation or the enterprise server.	
Default PathCode=	APPL_PGF	The name of a subdirectory under \b7 that OneWorld uses to find specifications to dispay signon information before an environment is selected.	
Base Datasource=	OneWorld Local	Data source representing the database from which logon information is retrieved.	
Object Owner=		The owner of the system database tables.	
Server=		The server on which the database resides	
Database=	OneWorld Local	The name of the database where the system tables reside.	
Load Library=	JDBODBC.DLL (non-Oracle), (default) JDBOCI73.DLL (Oracle only), JDBOCI80.DLL (Oracle only)	The JDE driver used to access the database that stores the system tables. This depends on the database to be used and the type of system running OneWorld.	
Decimal Shift=	N A flag to indicate if decimal shifti used for numeric data.		
Julian Dates=	N	A flag to indicate if dates are stored in Julian or database-specific format.	
Use Owner=	N	A flag to indicate that tables names are to qualified by owner.	
Secured=	N	Indicates whether or not this is a secured database requiring a user and password login.	
Type=	A (default), O, S, I	A single character denoting the type of database that stores the system tables. These can be O (Oracle), A (MS Access), S (SQL Server), or I (Client Access, AS/400).	
LibraryList=		AS/400 only. Database server that stores the system tables.	
Default Pwd=		The default password.	

# [DEBUG]

The settings in this section determine the location of the jde.log and jdedebug.log. The settings are also used to turn your jdedebug.log on and off.

Setting	Typical Value	Purpose	
TAMMultiUserOn	0		
= Output=	put= None Controls the status of the jdedebug file. Valid values		
		NONE. No trace information is written to jdedebug.log.	
		FILE. Database and runtime trace information is written to the file specified by the DebugFile= parameter in the [DEBUG] section.	
		EXCFILE. Runtime trace information is written to the file specified by the DebugFile= parameter in the [DEBUG] section.	
		BOTH. Trace information is written to both jde.log and jdedebug.log.	
ServerLog=	0 (default) or 1	0 disables the workstation requesting the business function JDE.LOG and JDEDEBUG.OG entries from the server.	
		1 enables workstation requesting business function JDE.LOG and JDEDEBUG.LOG entries from the server.	
LEVEL=	BSFN,EVENTS	This parameter controls the debug level. You can specify any combination of allowable values using commas as delimiters. The default setting is LEVEL=BSFN,EVENTS.	
		Valid values are:	
		EVENTS Traces the starting and stopping of events.  BSFN Traces when business functions are entered and when they return.  SF_x Traces when system functions execute. The x variable is any allowable system function value. Valid values are listed below:	
		SF_GRID SF_PARENT_CHILD SF_GENERAL SF_MESSAGING SF_WORKFLOW SF_WORKFLOW_ADMIN SF_MEDIA_OBJ SF_CONTROL	
		For example, LEVEL=SF_CONTROL. In addition, you can specify multiple system functions by separating them with commas. For example, LEVEL=SF_GRID,SF_CONTROL.	
DebugFile=	c:\jdedebug.log	The location and name of the jdedebug.log file.	
JobFile=	c:\jde.log	The location and name of the jde.log file.	

# [EVEREST]

Setting	Typical Value	Purpose
ShowAlias=	0 (default for PROD packages) 1 (default for APPL packages)	This setting enables (1) or disables (0) the ability to right-click on a data dictionary item and display its alias.

# [INSTALL]

The settings in this section contain directory paths and general installation information.

Setting	Typical Value	Purpose
DefaultSystem=	system	The name of the subdirectory under b7 that contains the OneWorld foundation code and tools.
ClientPath=	OneWorld Client Install	The name of the directory on the deployment server that contains the Workstation Installation program and other files used during deployment.
PackagePath=	package	The name of the subdirectory on the deployment server under a path code that contains the packages built for that path code.
DataPath=	data	The name of the subdirectory on the deployment server under the path code that contains the Access database delivered for all packages for that path code.
HOSTS=	hosts	The name of the directory on the deployment server that contains all types of host files. Used in the host configuration generate application.
HP9000=	hp9000	The name of the directory on the deployment server that contains HP9000 files. Used in the host configuration generate application.
RS6000=	rs6000	The name of the directory on the deployment server that contains RS/6000 files. Used in the host configuration generate application.
AS400=	as400	The name of the directory on the deployment server that contains AS400 files. Used in the host configuration generate application.
SUN=	sun	The name of the directory on the deployment server that contains Sun files. Used in the host configuration generate application.
LocalCodeSet=	WE_ISO88591	A setting used to determine alternate language usage. See <i>Language Overview</i> in the <i>OneWorld Upgrade Guide</i> (B73.3.3) for other values.

Setting	Typical Value	Purpose
ActiveConsole	0 or 1	If this setting is 0, the package build does not add the entry to the package.inf file. If this setting is 1, an ActivEra Console shortcut is added to the package build .INF file. When the package is installed to a workstation, the shortcut is added to the desktop.
ExplorerShortCut	0 or 1	If this setting is 0, the OneWorld shortcut and startup is not built into the package, so it does not get delivered and put onto the desktop. If this setting is 1, the OneWorld shortcut and startup is built into the package and installed on the desktop during an installation.
WebAdmin=	0 or 1	A setting of 1 gives the user administrative rights to the Java & HTML Generator, which means that the administrator can generate any Java serialized object publicly. A setting of 0 means that the user can only generate personal forms and menus using the Java & HTML Generator.

## [JDE\_CG]

Setting	Typical Value	Purpose
STDLIBDIR=	\$(COMP)\VC98\lib	The path to the lib directory used by the MSVC compiler. This value is updated by a workstation installation based on the user's deployment preferences.
TPLNAME=	EXEFORM2	
ERRNAME=	CGERR	
TARGET=	Debug (default) Release	Used by the code generator and global build program to determine the type of build. Customer should only build under release, as there will be conflicts with the release build of the tools if they build under debug.
INCLUDES=	<pre>\$(COMP)\VC98\include; \$(SYSTEM)\include; \$(SYSTEM)\cg; \$(APP)\include; \$(SYSTEM)\includev</pre>	The path to the include (header files) directory used by the MSVC compiler. This value is updated by a workstation installation, based on the user's deployment preferences.
LIBS=	\$(COMP)\VC98\lib; \$(SYSTEM)\lib32; \$(APP)\lib32; \$(SYSTEM)\libv32	The path to the library directory used by the MSVC compiler and OneWorld Foundation. This value is updated by a workstation installation, based on the user's deployment preferences.
MAKEDIR=	\$(COMP)\VC98\bin; \$(COMP)\Common\MSD ev98\Bin	The path to the make directory used by the MSVC compiler. This value is updated by a workstation installation, based on the user's deployment preferences.
USER=	user name	The user ID of the person who performed the workstation installation.

# [JDEMAIL]

Setting	Typical Value	Purpose
mailProfile=	Default Profile	The name of the profile to be used for external mail systems that are accessed through OneWorld Work Center. Examples of external mail servers include Microsoft Exchange Server and Lotus Domino Mail Server.
mailServer=	owsmtp.jdedwards.com	The domain name of the SMTP server to be accessed for sending server mail messages.

# [JDENET]

Setting	Typical Value	Purpose
serviceNameListen=	6005	
serviceNameConnect=	6005	
maxLenInlineData=	1024	For internal use only.
maxLenFixedData=	4096	For internal use only.
maxFixedDataPackets=	1024	For internal use only.
netTrace=	0	
kernelDelay=	0	For internal use only.

# [JDENET\_KERNEL\_DEFx]

Setting	Typical Value	Purpose
bOneUserOnly=	0	Parameter value of 1 allows the client workstation to get its own kernel process on the server. For the setting to work, a corresponding parameter, bAllowOneUserOnly, with a value of 1, must be added to the [JDE_KERNEL_DEFx] section of the server jde.ini file.
		Specify the kernel process that the user will have on the server by adding the number of the kernel definition section:
		[JDENET_KERNEL_DEF6]
		bOneUserOnly=1
		This setting allows a client workstation to have its own CallObject kernel process on the server.

#### [LOCK MANAGER]

Setting	Typical Value	Purpose
Server=	server name	This setting indicates the lock manager server to be used to process records. The value for this setting is the name of the server acting as the lock manager.
RequestedService=	NONE	This setting indicates the type of service that the workstation requests from the server. The service that is currently being provided by the server is time stamping (TS) only.

#### [NETWORK QUEUE SETTINGS]

The settings in this section contain the name of the queue that is used when running batch jobs on the server. The settings also show the workstation's UBE priority and whether to hold the jobs in a spool file or immediately send them to a printer.

Setting	<b>Typical Value</b>	Purpose
UBEQueue=	QBATCH	The batch name that the client submits for the UBE or package installation to the server.
UBEPriority=	5	The priority set when the UBE is submitted. For workstations, valid values are 1 to 5, where 1 is the highest priority setting. The priority setting is relative to other UBE jobs submitted by OneWorld.
PrintImmediate=	FALSE (default) or TRUE	OneWorld servers hold the UBE spool files submitted from a OneWorld workstation unless the jde.ini file on the workstation has the PrintImmediate=TRUE setting (this is case sensitive) in the [NETWORK QUEUE SETTINGS] section.
		On the AS/400, the spool file is created with the HOLD(*YES) attribute as a default. If the setting, PrintImmediate=TRUE is set in the jde.ini file on the workstation, upon submission of the UBE to the OneWorld server, the spool file is released once it is placed on the appropriate outqueue and closed.
SaveOutput=	TRUE (default) or FALSE	A setting that lists whether the user wants to save the log files generated by the UBE.
InstallSpecs=	Y	A setting that lists whether the user wants to install specifications when submitting UBEs.
JDENETTimeout=	60	The timeout value, listed in seconds, for clients to attempt to connect to the server.

## [OBJECT LIBRARIAN]

Setting	Value	Purpose
OLTLogMode=	YES (default) or NO or APPEND	This setting specifies if and how the Object Management Workbench Transaction log (OLT.log) is generated. It has three options, YES, NO and APPEND.
		If the value is YES, the OLT.log is generated for each transaction. If the log exists before a transaction, its contents are overwritten.
		If the value is NO, no OLT.log is generated during Object Management Workbench object transactions.
		If the value of the setting is APPEND, the information for a transaction is appended to the OLT.log. When the size of the log reaches its maximum size allowed (2 MB), the user is prompted to rename the existing file. If the user chooses not to rename it, the existing contents of the log will be overwritten by the information generated by the new transaction.
OLTLogContents=	GENERAL (default) or DETAIL	This setting specifies if detail information about specification records will be generated in the OLT.log. It has two options, GENERAL and DETAIL.
		If the value is GENERAL, no detail information about specification records will be generated.
		If the value is DETAIL, detail information will be generated.

# [PORTAL]

This section defines settings for configuring PORTAL.

Setting	Typical Value	Purpose
UseJASPortal	0	This setting is retroactive with older versions of the portal.
;JASWebServer	"modelstore2"	This setting indicates the location of the JAS web server. The ActivEra Console will append special flags to navigation.
;JASPortalURL	"http://modelstore2/Acti vEra"	This setting indicates the URL for the ActivEra portal for Pure JAS and Hybrid portal scenarios. The default is No Entry.

PortalURL		The URL for the ActivEra portal for a non-JAS portal scenario. The default is PortalLocationError.htm. It is used when no JASPortalURL entry is found.
:JASForceEnv	override_environment	If this setting is used, One World ignores the PORTALENVMAP.INI section. The default is no override.

#### [PORTALENVMAP]

This section defines settings for configuring PORTAL environments.

Setting	Typical Value	Purpose
PDEV7332	PDEV7332WP	These settings contain the environment name. The
P7332ASD2	7332ASD2W	typical value is the web/WAN version of that same environment.
P7332HPO2	P7332HPO2W	

## [REPLICATION]

Setting	Typical Value	Purpose
DefaultEnvironment=	environment name	The Default Environment must contain a valid environment for the path code in which the publisher resides.
RepTrace=	0 (default) or 1	A 1 turns on replication tracing (logging). A 0 indicates that replication tracing is off.
ForcedSync=	(entry does not appear initially)	Typically, OneWorld uses this setting for workstations after they initially load packages from a deployment server. The values for this setting are:  • 0=off • 1=on  OneWorld forces synchronization of replicated tables if the value for this setting is 1 or if this setting does not appear in the jde.ini file. After OneWorld synchronizes the replicated tables on the publisher and the subscriber, OneWorld either changes the value from 1 to 0 or writes this setting into the jde.ini file with a value of 0.

## [SECURITY]

Setting	Typical Value	Purpose
SecurityServer=	server name	
RowSecurity=	DEFAULT	
DataSource=	ORACLE PVC	
DefaultEnvironment=	environment name	This setting defines a valid environment in which the path code defines F98OWSEC.

UnifiedLogon=	0 (default), or 1	This setting specifies whether the unified logon feature is on or off. When off, Oneworld uses the standard logon functionality. Enter 0 (or leave blank) to set unified logon to off, or 1 to set it to on.
UnifiedLogonServer=	server name	This setting specifies where the unified logon server resides. If no server is present, OneWorld uses the OneWorld security server.
ShowUnifiedLogon=	0 or 1 (default)	This setting determines whether the OneWorld environment selection form appears when the unified logon feature is used. Enter 0 if you do not want the environment selection form to be displayed, or 1 to display the form.

# [SVR]

The settings in this section contain environment and subdirectory information.

Setting	Typical Value	Purpose	
EnvType=	1	Used by JDEKRNL.	
EnvironmentName=			
SpecPath=	spec	This line and all of the following lines in this section specify the path names that enables other OneWorld source programs to locate files. For instance, if "spec" were ever to be changed to "specifications", changing SpecPath would allow this on the fly. This value is not updated by any program or process. The only reason to change this is aesthetic. This is the subdirectory under the path code used to store the replicated set of specification files on the workstation.	
SourcePath=	source	On the client workstation, this is the subdirectory under the path code used to store the business function source files.	
ObjectPath=	obj	On the client workstation, this is the subdirectory under the path code used to store the business function object files.	
HeaderPath=	include	On the client workstation, this is the subdirectory under the path code and system directory used to store the business function and system header files.	
HeaderVPath=	includev	On the client workstation, this is the subdirectory under the system directory used to store the foundation code header files.	
BinPath=	bin32	On the client workstation, this is the subdirectory under the path code and system directory used to store the replicated set of business functions, and application and foundation code dlls.	
LibPath=	lib32	On the client workstation, this is the subdirectory under the path code and system directory used to store the business function and system lib files.	
LibVPath=	libv32	On the client workstation, this is the subdirectory under the path code and system directory used to store the third party libraries.	

Setting	Typical Value	Purpose	
MakePath=	make	On the client workstation, this is the subdirectory under the path code used to store the replicated set of business function make files. This value is not updated by any program or process. J.D. Edwards recommends that you not change the name of this directory.	
WorkPath=	work	On the client workstation, this is the subdirectory under the path code used to store the replicated set of application temp files that are created during a build. This value is not updated by any program or process. J.D. Edwards recommends that you not change the name of this directory.	
CodeGeneratorPath=	cg	On the client workstation, this is the subdirectory under the system directory used to store the templates for interactive application form types. These templates are used at runtime and are created during a build of applications.	
ResourcePath=	res	On the client workstation, this is the subdirectory under the path code used to store the replicated set of bitmaps.	
IconPath=	res\icons	On the client workstation, this is the subdirectory under the path code used to store the replicated set of icons.	
FontPath=	res\font	On the client workstation, this is the subdirectory under the path code used to store the replicated set of fonts.	
HelpPath=	helps	This is the path to the location that stores the client-accessible set of replicated help files, if any. This path can point to a server. This path is specified in User Profiles.	
TreeBmpPath=	res\treebmps	On the client workstation, this is the subdirectory under the path code used to store the tree bit map files.	
ModelPath=	models	On the client workstation, this is the subdirectory under the path code used to store the models files.	
LocalePath=	locale	This is the base directory for the National Language Support (NLS) conversion tables.	
Iconvpath=	locale\Iconv	This is the directory for the National Language Support (NLS) conversion map.	

# [TAPI]

Setting	Value	Purpose
ProgID=OWTAPI.driver.1	The name of the driver for the third-party telephony product (instead of driver)	This setting identifies to OneWorld the logical name of the third-party telephony product's driver. You can obtain this information from the driver vendor or the Worldwide Customer Support administrator.  A standard OneWorld distribution also includes a test driver called TestDriver. When you enter this driver name, the setting would look like this:
		ProgID=OWTAPI.TestDriver.1

#### [TAPI - driver]

Setting	Value	Purpose
Host=	The host and port	This section is for third-party telephony drivers
Port=	number for the telephony driver. For example:	that have additional configuration settings. For example, you might need to specify the host and port number for the third-party telephony product.
	Host=ctiserver1.jdedw ards.com	You can obtain the entries for this section from the driver vendor or the Worldwide Customer Support administrator.
	Port=8001	

#### [UBE]

The settings in this section determine whether the jdedebug.log is on or off. The settings also determine the level of debugging.

Setting	Value	Purpose
UBEDebugLevel=	0 (default), 1, 2, 3, 4, 5, or 6	Used to specify what level of debugging information will be provided when using UBE debug logging. 6 is the highest level of logging information.  0 = Error messages only
		1 = Informative messages
		2 = Section-level messages
		3 = Object-level messages
		4 = Event rules messages
		5 = SQL statements
		6 = UBE function messages
UBESaveLogFile=	0 (default), or 1	This determines whether UBE debug log files will be saved. A 0 means they will not be saved, and a 1 means the files will be saved.
UBEFDFTool=	directory path	This setting points to a viewer, such as Microsoft Excel. An example of the directory path value is <i>c</i> :\msoffice\Office\Excel.exe.
WebServer=	0 or 1	A setting of 1 is required for developers to run the Web Generator.

## [WORKFLOW]

Setting	Value	Purpose
Asynchronous Workflow=		Used to turn on and off asynchronous workflow. The default value is FALSE.

## [EXPLORER]

Setting	Value	Purpose
ExplorerHomeURL=	variable	Variable value should be the URL of the Solution Explorer Home Page
ExplorerStart=	variable	Variable value should be either INTERNET (to start the Solution Explorer from the Home Page) or TASK (to start the Solution Explorer from a task view.)

## [ACTIVE DIRECTORY]

Setting	Value	Purpose
JdenetSCP	variable	The value will be the name of the Service Connection Point object in Active Directory. The SCP allows the workstation to connect to a server that has OneWorld running on it. Typically the name will be the name of the OneWorld service running on the server, such as JDEDWARDS_ONEWORLD_B733_SP12. JdenetSCP is the connection port parameter.
SecurityServerSCP	variable	Same as above. SecurityServerSCP is the security server parameter.
LockManagerSCP	variable	Same as above. LockManagerSCP is the Lock Manager parameter
UnifiedLogonServerSCP	variable	Same as above. UnifiedLogOnServer SCP is the unified logon server parameter.

# **Understanding AS/400 Server JDE.INI Settings**

This section describes in detail the settings found in the OneWorld AS/400 server INI. Information is organized by section, for example [DEBUG]. Sections are alphabetized, but settings found within sections are generally listed in the order in which they are found in the software.

#### [AS400]

Setting	Value	Purpose
CRTMOD=	CRTMOD MODULE(%s/%s) SRCFILE(%s/%s) SRCMBR(%s) OUTPUT(*PRINT) DBGVIEW(*NONE) OPTIMIZE(40)	The string used by the package install to compile business functions. Note that CRTMOD and CRTMOD2 are concatenated, and used by OneWorld to compile business functions.
CRTMOD2=	DEFINE(JDENV_AS400M UTEX PRODUCTION_ VERSION NO_SIGNALS) TGTRLS(V4R3M0)	The concatenated string used by the package install for declaring additional definitions for compiling business functions.
CRTSRVPGM=	CRTSRVPGM SRVPGM(%s/%s) MODULE(%s/*ALL) BNDSRVPGM(JDELIB JDEKRNL OWVER) EXPORT(*ALL) OPTION(*DUPPROC *DUPVAR *UNRSLVREF) ALWLIBUPD(*YES) TGTRLS(V4R3M0)	The string used by the package install for binding business function modules to create the OneWorld service programs (*SRVPGM).
CRTDBPGM1=	CRTPGM PGM(%s/%s) MODULE(DBDRVAG DBDRV_AC DBDRV_CC DBDRV_CN	The concatenation of CRTDBPGM* settings are used to create the database programs JDB_*. These database programs are automatically created by OneWorld at start-up. The SENTINEL job creates them at start-up time, and monitors and creates additional programs as needed during runtime. The status of the programs and their usage is maintained in the user space JDEPGMCTL in the CONTROL library.
CRTDBPGM2=	DBDRV_CH DBDRV_CP DBDRV_RQ DBDRVSQL DBMONCTL DBDRVDLI	See Purpose for CRTDBPGM1.

Setting	Value	Purpose
CRTDBPGM3=	DBSQL_DBSQL_A DBSQL_D DBSQL_I DBSQL_M DBSQL_S DBSQL_U DBSQL_X	See Purpose for CRTDBPGM1.
CRTDBPGM4=	BNDSRVPGM(JDEKRNL JDELIB JDEIPC) ACTGRP(%s) OPTION(*DUPPROC	See Purpose for CRTDBPGM1.
CRTDBPGM5=	*DUPVAR) ALWLIBUPD(*YES) AUT(*ALL) TGTRLS(V4R3M0)	See Purpose for CRTDBPGM1.
PrintUBEJoblog=	FALSE (default) or TRUE	If true, indicates that OneWorld always writes the AS/400 JOBLOG for the batch application (UBE) to a spool file.
PrintUBEJoblogOn Error=	FALSE (default) or TRUE	If true, indicates that OneWorld writes the AS/400 JOBLOG for the batch application (UBE) to a spool file if an error occurs, for example, if a UBE fails.

# [BSFN BUILD]

Setting	Value	Purpose
Build Area=	/jdeb733_0/packages	The location on the server where the package will be built.
Optimization Flags=	(40)	Machine dependent. These compile flags are used when building business functions in "Release" mode. You should not change these flags.
DebugFlags=	*ALL	Machine dependent. These compile flags are used when building business functions in "Debug" mode. You should not change these flags.
InliningFlags=	Y (default, yes) N (no)	Yes turns on inlining on the AS400. No turns it off. This entry is blank for non-AS/400 servers.
DefineFlags=	JDENV_AS\$))MUTEX PRODUCTION_VERSI ON JDBDB2400 AS400V3R6	
CompilerFlags=	*EXPMAC *NOSHOWINC	This setting determines whether to compile listings when building a server package. If it is set to *PRINT, listings are compiled. If set to *NONE, listings are not compiled.

Setting	Value	Purpose
CompileOutput=	*PRINT or blank	Machine dependent. Valid compiler flags.
		The spill flag sets the stack space when business functions are compiled. J.D. Edwards has found that 1024 is adequate to compile the delivered business functions. While values other than the default of 1024 may be valid on various host platforms, this is the only value validated by J.D. Edwards.
OSReleaseLevel=	V4R3M0	The release level to which you are compiling. You should not change this setting.
LinkFlags=	*DUPROC *DUPVAR * UNRSLVREF	Machine dependent. These flags are used when linking business functions. You should not change these flags.
LinkLibraries=	JDELIB, JDEKRNL, JDENET, JDEIPC, OWVER	Libraries to which business functions are linked. (Windows NT and AS/400 servers only.)
SimultaneousBuilds=	0 (default) any integer	Indicates the number of DLLs that can be built at a time. 0 (zero) means that all DLLs will be built simultaneously.
QName=	as400 batch jobq name	The job queue name to which all package builds will be submitted. If left blank, QName uses the default JOBQ as specified in the OneWorld user profile doing the submitting.

# [DB SYSTEM SETTINGS]

The settings in this section contain information about the default environment and path code.

Setting	Value	Purpose
Version=	43	A version number to prevent mismatch of the jde.ini file with the running version of OneWorld.
Default User=	JDETL	The user account name for the database bootstrap tables.
Default Pwd=	JDETL	The user account password for the database bootstrap tables.
Default Env=	B733APP	The default data source on the workstation or the enterprise server.
Default PathCode=	B733APP	The subdirectory under \\$PKG under which the business function code is stored.
Base Datasource=	DB2	The data source representing the database from which logon information is retrieved.
Object Owner=		The owner of the system database tables.
Server=	server name	The server on which the database resides

Setting	Value	Purpose
Database=	database name	The name of the database where the system tables reside.
Load Library=	DBDR (default)	The JDE driver used to access the database that stores the system tables. This depends on the database to be used and the type of system running OneWorld.
Decimal Shift=	Y (default) or N	A flag to indicate if decimal shifting is used for numeric data.
Julian Dates=	Y (default) or N	A flag to indicate if dates are stored in Julian or database-specific format.
Use Owner=	Y or N (default)	A flag to indicate that tables names are to be qualified by owner.
Secured=	Y (default) or N	Indicates whether or not this is a secured database requiring a user and password login.
Type=	I	A single character denoting the type of database that stores the system tables. This value can be O (Oracle), A (MS Access), S (SQL Server), or I (Client Access, AS/400).
Library=	database library	AS/400 only. The database library that stores the system tables.
DatabaseProgamMax=	-1 (default)	AS/400 only. The maximum number of database connection programs to allow. The value -1 means no limit.
DatabaseProgramInitial=	10 (default)	AS/400 only. The number of database connection programs to start initially at OneWorld start.
DatabaseProgramThreshold=	3 (default)	AS/400 only. The threshold for starting new database connection programs. If the number of database connection programs not in use drops below this limit, start new ones.
DatabaseProgramAdditional=	10 (default)	AS/400 only. The number of new database connection programs to start when the threshold number is reached.
DatabaseProgramCheckInterva lSeconds=	10 (default)	AS/400 only. The length, in seconds, before OneWorld will be put to sleep after the database connection programs are created.

Setting	Value	Purpose
Default Journal=	OW_JRNL	AS/400 only. The name of the default journal. Journaling is required on the AS/400 for rollback recovery. There are two components to journaling: the journal and the journal receiver. Both before and after images of a database transaction can be recorded by journaling. This can be set to any character string, 10 characters or fewer.
Default Journal LIBRARY=	journal library	AS/400 only. The library name where the journal is stored. This can be set to any valid library name. The library name changes for each release.
Default Journal Receiver	OW_JRNL000	AS/400 only. The name of the journal receiver. This can be set to any character string, 10 characters or fewer.
Default Journal Receiver LIBRARY=	journal library	AS/400 only. The library name where the journal receiver is stored. This can be set to any valid library name. The library name changes for each release.
Size of Journal Receiver=	6000	AS/400 only. This setting specifies a storage space threshold value (in KB) for the journal receiver. If the threshold value is exceeded during journaling, one of the following occurs:  • The message CPF7099 is sent to the journal message queue if the journal has the MBGRCV(*USER) attribute.  • The system attempts to create and attach a new receiver if the journal has the MBGRCV(*SYSTEM) attribute. When the old receiver is detached, the message CPF7020 is sent to the journal message queue. If the attempt fails due to lock conflicts, the system sends the message CPI70E5 and then tries again every ten minutes until the change journal operation is successful.  • When the system cannot determine if the journal has the MBGRCV(*SYSTEM) attribute, or if the attempt to create and attach a new journal receiver fails because of something other than a lock conflict, the message CPI70E3 is sent.

#### [DEBUG]

The settings in this section determine the location of the jde.log and jdedebug.log. The settings are also used to turn your jdedebug.log on and off.

Setting	Typical Value	Purpose
Output=	FILE	Controls the status of the jdedebug log file. Valid values are:
		NONE. No trace information is written to jdedebug.log.
		FILE. Database and runtime trace information is written to the file specified by the DebugFile= parameter in the [DEBUG] section.
Trace=	TRUE	Writes additional trace information to the log files to aid in debugging.
DebugFile=	JDEB733/ jdedebug	Location of the jdedebug log. J. D. Edwards ships OneWorld with this value set to jdedebug. No processes update this value. The names of the resulting files will be <code>path/jdedebug_######.log</code> , where <code>#######</code> represents the AS/400 job number associated with the job that created the file.
		<b>Note:</b> OneWorld does not create the path to these files. The path must exist prior to the logging process. The path resides in the Integrated File System (IFS) on the AS/400. You can use the AS/400 WRKLNK command to see a list of directories and files and navigate between the IFS directories. J.D. Edwards ships a command called DSPSTMF that allows you to view these log files. In addition, you can set up Client Access to more easily view some of the smaller log files.
		See <i>Using AS/400 Integrated File System Logging Support</i> for details about how to set up Client Access to view log files.
JobFile=	JDEB733/jde.log	Location of the jde log. J.D. Edwards ships OneWorld with this value set to the jde.log. No processes update this value. Examine the log files jde.log, and jdedebug for information useful to assist in problem analysis and resolution. The names of the resulting files will be <i>path</i> /jde_######.log where ###### is the AS/400 job number associated with the job that created the file.
		See <i>Using AS/400 Integrated File System Logging Support</i> for details about how to set up Client Access to view log files.
JDETSFile=	/JDEB733/JDETS. LOG	This specifies the location of the lock manager trace file on the AS/400.
ClientLog=	1 (default) or 0	1 enables servicing CALLOBJ server trace to workstation.
		0 disables servicing CALLOBJ server trace to workstation.
LogErrors=	1 (default) or 0	The action for error messages. 0 or FALSE indicates that no error messages will be written to JDE.LOG. 1 or TRUE indicates that error messages will be written to JDE.LOG.
KeepLogs=	1	A 1 indicates that the logs will be saved after printing. A 0 indicates that the logs will not be saved.

Setting	Typical Value	Purpose
RunBatchDelay=	0	Specifies the time that runbatch waits upon startup, in seconds. This setting allows developers to start debugging the job or process.
TAMTraceLevel=	0 (default)	Specifies the level of TAM tracing, where 0 is off and 9 provides the greatest amount of tracing detail.
RepTrace=	0 (default) or 1	You can enable replication trace if you want to troubleshoot on your replication process. When you enable this trace, the replication process sends additional information to JDE.LOG. Do not leave replication trace on permanently, as JDE.LOG will become too large.  Valid values are:  0 = OFF  1 = ON

## [INSTALL]

The settings in this section contain directory paths and general installation information.

Setting	Typical Value	Purpose
DefaultSystem=	B733SYS	The name of the OneWorld System library.
ClientPath=	B733APP	The name of a valid path code on the deployment server that contains the workstation installation program and other files used during deployment.
B733=		Should be left blank on the AS/400.
LocalCodeSet=	US_EBCDIC	A setting used to determine alternate language usage. See <i>Language Overview</i> in the <i>OneWorld Upgrade Guide</i> (B73.3) for other values.
WebAdmin=	1	This setting specifies whether the system generates all of the Java objects for the default user. This includes overriding Java objects previously generated. If you leave this value blank, the system generates all the Java objects for the current user.
EnvCreation=	1 (default) to 5	This setting determines the number of environments that can be processed (loaded) at the same time.

# [JDEIPC]

Setting	Typical Value	Purpose
maxNumberOfResources=	1000	The total number of IPC resources that are available to JDE.
startIPCKeyValue	2101	On NT, this value is used just to uniquely name the IPC Shared memory. On all other systems, this is the value of the IPC ID, which JDEIPC used for its shared memory. This value, plus the maxNumberOfResources, defines the range of IPC IDs that JDE will use on the system. SysAdmins should ensure that this range of IDs is not used by any other software. Although JDEIPC will not use an existing ID in its range, this may not be true of other software.
avgResourceNameLength	15	JDE Internal. Increase this value if you get an IPC error 'String table full."
maxMsgqEntries=	1024	
mazMsgqBytes=	65536	
ipcTrace=	0	

# [JDEMAIL]

Setting	Typical Value	Purpose
mailServer=	owsmtp.jdedwards.com	The domain name of the SMTP server to be
		accessed for sending server mail messages.

## [JDENET]

Setting	Typical Value	Purpose
serviceNameListen=	jde_server	
serviceNameConnect=	jde_server	
maxNetProcesses=	1	Defines the maximum number of JDENET_N processes that can be running. You can increase the value for a server that is expecting heavy JDENET message flow.
maxNetConnections=	800	The total number of connections that all JDENET_N processes can handle. This value is platform-specific. You can increase the value for a server that is expecting to handle larger number of workstations at the same time.
netShutdownInterval=	15	
maxKernelProcesses=	1000	The maximum number of JDENET_K processes that can be running. The value should be greater than all of the values added together in maxNumberOfProcesses for all the dedicated servers.
maxKernelRanges=	12	The number of dedicated servers and types.

Setting	Typical Value	Purpose
kernelDelay=	0	For internal use only.
maxLenInlineData=	1024	For internal use only.
maxLenFixedData=	4096	For internal use only.
maxFixedDataPackets=	1024	For internal use only.
netTrace=	0	
krnlCoreDump=	0	For internal use only.
newProcessThreshold Connects=	0	

### [JDENET\_KERNEL\_DEFX]

This section defines internal dedicated server processes for JDENET. The sections are numbered JDENET\_KERNEL\_DEF1 to JDENET\_KERNEL\_DEF12. The settings in these sections should not be changed except where noted below.

Setting	Value	Purpose
bAllowOneUserOnly=	1	Parameter value of 1 means that one-user-only kernel processes are allowed on client workstations. The default is to allow one-user-only kernel processing. Add the setting only for CallObject kernel processes:
		[JDENET_KERNEL_DEF6] bAllowOneUserOnly=1
		Setting must be added in conjunction with adding a [JDENET_KERNEL_DEFx]
		bOneUserOnly=1 section to the client workstation jde.ini file.

krnlName	DEF1: JDENET RESERVED KERNEL	DEF1: Used for internal purposes and testing.
	DEF2: UBE KERNEL	DEF2: Processes OneWorld batch
	DEF3: REPLICATION KERNEL	process requests.
	DEF4: SECURITY KERNEL	DEF3: Processes data replication requests.
	DEF5: LOCK MANAGER KERNEL	DEF4: Processes security server
	DEF6: CALL OBJECT KERNEL	requests.
	DEF7: JDBNET KERNEL	DEF5: Processes transaction
	DEF8: PACKAGE INSTALL KERNEL	manager and lock manager requests.
	DEF9: SAW KERNEL	DEF6: Processes requests for remote master business functions
	DEF10: SCHEDULER KERNEL	(MBF).
	DEF11: PACKAGE BUILD KERNEL	DEF7: Processes JDBNet server-to-server requests.
	DEF12: UBE SUBSYSTEM KERNEL	DEF8: Processes package installation requests.
		DEF9: Processes SAW application requests.
		DEF10: Processes Secheduler application requests.
		DEF11: Processes package build requests.
		DEF12: Processes UBE subsystem requests.

dispatchDLLName=	DEF1: JDENET	Identifies the name of the
	DEF2: JDEKRNL	JDENET service program.
	DEF3: JDEKRNL	
	DEF4: JDEKRNL	
	DEF5: JDEKRNL	
	DEF6: JDEKRNL	
	DEF7: JDEKRNL	
	DEF8: JDEKRNL	
	DEF9: JDESAW	
	DEF10: JDEKRNL	
	DEF11: JDEKRNL	
	DEF12: jdekern.dll	
dispatchDLLFunction=	DEF1: JDENET_Dispatch Message	The name of the JDENET
	DEF2: JDEK_DispatchUBEMessage	function for handling JDENET messages. The dispatchDLLName and dispatchDLLFunction entries
	DEF3: DispatchRepMessage	are platform specific.
	DEF4: JDEK_DispatchSecurity	
	DEF5: TM_DispatchTransactionManager	
	DEF6: JDEK_DispatchCallObject Message	
	DEF7: JDEK_DispatchJDBNETMessage	
	DEF8: JDEK_DispatchPkgInstallMessage	
	DEF9: JDEK_DispatchSAWMessage	
	DEF10: JDEK_DispatchScheduler	
	DEF11: JDEK_DispatchPkgBuildMessage	
	DEF12: JDEK_DispatchUBESBSMessage	

OneWorld Xe (09/00) 16–29

maxNumberOfProcesses=	1	The maximum number of kernel processes that can be run on this server for each kernel type. The user can modify this setting to tune performance. The default value is 1 for all JDENET_KERNEL_DEF sections.
numberOfAutoStartProcesses=	0	The number of kernel processes that will automatically start for each kernel type. If this number is 0, then no processes will start automatically for that kernel type. This number must be less than the maximum number of processes for that kernel type. The user can modify this setting to tune performance. The default value is 0 for all JDENET_KERNEL_DEF sections.

#### [LOCK MANAGER]

Setting	Typical Value	Purpose
AvailableService=	NONE	This setting indicates the service that the lock manager server is offering. It is also used to indicate whether the lock manager server is on or off. Valid values are TS and NONE.
RequestedService=	NONE	This setting indicates the type of service that the workstation requests from the server. The service that is currently being provided by servers is time stamping (TS) only. Valid values are TS and NONE.

#### [NETWORK QUEUE SETTINGS]

The settings in this section contain the name of the queue that is used when running batch jobs on the server. The settings also show the workstation's UBE priority and whether to hold the jobs in a spool file or immediately send them to a printer.

Setting	Typical Value	Purpose
DefaultPrinterOUTQ=	QGPL/ONEWORLD_A	The default printer to which batch applications will be routed.
UBEQueue	QBATCH	The batch name that the client submits for the UBE or package installation to the server.
JDENETTimeout=	60	The timeout value, listed in seconds, for clients to attempt to connect to the server. A server can act as a client when it uses JDBNET, submits UBEs to another server, calls a business function on another server, uses a Lock Manager on another server, or when it makes security server requests to another server.

# [SECURITY]

Setting	Typical Value	Purpose
DataSource=		
User=	JDESVR	
Password=	JDESVR	
DefaultEnvironment=	P733ASD1	Defines a valid environment in which the path code defines F98OWSEC.
SecurityServer=	security server name	
ServerPswdFile=	TRUE	The setting of this parameter determines whether OneWorld uses special password handling for batch reports running on the server. Set the value to TRUE to instruct OneWorld to enable special handling of passwords. Set the value to FALSE to disable special handling.  When OneWorld runs a batch report on the server, it runs the report using a string of line commands and parameters that includes the "user password". Under some operating systems, it is possible to query the status of a job and view the parameters that were used to start the process.  As a security measure, you can enable special handling by OneWorld. When enabled, OneWorld does not include the "user password" in the parameter list for a batch process. Instead, it includes the name of a file that contains the "user password". OneWorld instructs the operating system to destroy this file as soon as the batch report reads the password.
History=	0	

SecurityMode=	0 (default), 1, or 2	This setting controls whether OneWorld uses the standard logon procedure, unified logon, or both. Enter 0 to accept only the standard logon, 1 to accept only the unified logon, or 2 to accept both.
AllowedUsers=	group or user names	This setting for the unified logon feature enables you to specify users or groups who are allowed to use OneWorld.  If no users or groups are specified, all users who have logged on to the proper domains are authenticated by the unified logon server.

#### [SVR]

The settings in this section contain environment and subdirectory information.

Setting	Typical Value	Purpose
SpecPath=		This line and all of the following in this section specify the path names that enable OneWorld source programs to locate files. This value is not updated by any program or process. The only reason to change this is aesthetic. This is the subdirectory under the path code that stores the replicated set of specification files on the workstation.
PackedSpecPath=	/b733APP	

## [TCENGINE]

Setting	Typical Value	Purpose
TraceLevel=	0 (default)	The level of table conversion logging to perform. Valid values are 0–9, where 9 generates the most logging, and 0 generates no logging.
StopAfterRow=	0 (default)	The number of rows to process during table conversion.  This setting is useful for debugging. The value 0 indicates that the table conversion processes all rows. Enter a number to indicate the number of rows after which to stop proceeding.
ForceRowByRow=	0 (default) or 1	A 0 allows inserts from selects.  A 1 forces table conversions to convert one row at a time, regardless of whether an insert could be used.

## [UBE]

The settings in this section determine whether the jdedebug.log is on or off. This setting also determines the level of debugging.

Setting	Typical Value	Purpose
UBEDebugLevel=	0 (default), 1, 2, 3, 4, 5, or 6	Used to specify what level of debugging information will be provided when using UBE debug logging. 6 is the highest level of logging information.
		0 = Error messages only
		1 = Informative messages
		2 = Section-level messages
		3 = Object-level messages
		4 = Event rules messages
		5 = SQL statements
		6 = UBE function messages
UBESubsystemLimit	3	Used to specify the number of subsystem jobs per report version.
UBEPrintDataItems	0 (default), or 1	Used to specify whether to print the associated data item description in the .pdf file as meta data for third-party vendors. 0 is no, and 1 is yes.
Default Printer Queue Value= (for example, QPGL/ONEWORLD_A)	POSTSCRIPT- PRINTER,PAGESIZE (250,250),DRAWER (LETTER),ORIENT(L)	Used to specify the default printer used for printing batch application reports.
WebServer	1	This setting specifies whether the system enables the UBE feature from the web server and identifies the OneWorld kernel as a web kernel to meet the special needs of the web. If you leave this value blank, the calls from the business functions or the error message handling from the kernel will not work properly.

## [WORKFLOW]

Setting	Value	Purpose
Asynchronous Workflow=		Used to turn on and off asynchronous workflow. The default value is FALSE.

# [WORLD ENVIRONMENT MAP]

Setting	Value	Purpose
OneWorldEnvironmentName= (for example, APPLJDEDC2)	WorldEnvironment Name (for example, QA73COMP)	The string used by special business function code to set up WorldSoftware library lists from within OneWorld. The library lists call WorldSoftware from OneWorld. As of B73.3; the functions associated with these settings might not be utilized by application developers.

# Understanding UNIX Server jde.ini Settings (HP9000, RS/6000, or Sun Servers)

This section describes in detail the settings found in the OneWorld UNIX server jde.ini file. Some settings may differ between server platforms. Information is organized by section, such as [DEBUG]. Sections are alphabetized, but settings found within sections are generally listed in the order in which they are found in the software.

#### [BSFN BUILD]

Setting	Value	Purpose
Build Area=	/usr/jdedwardsoneworld/b733 /packages	The location on the server where the package will be built.
Optimization Flags=	+02 (default for HP9000)	Machine dependent. These compile flags are used
	-02 (default for RS/6000 and Sun)	when building business functions in "Release" mode. You should not change these flags.
DebugFlags=	-g -y -D_DEBUG -DJDEDEBUG (default for HP9000)	Machine dependent. These compile flags are used when building business functions in "Debug" mode. You should not change these flags.
	-g -qfulpath -qdbextra -D_DEBUG -DJDEDEBUG (default for RS/6000)	
	-g -D_DEBUG -DJDEDEBUG (default for Sun)	
InliningFlags=	blank (default)	A value of Yes turns on inlining on the AS400. A value of No turns it off. This entry is blank for non-AS/400 servers.
DefineFlags=	-DKERNEL -DPRODUCTION_VERSION -DNATURAL_ALIGNMENT -D_HPUX_SOURCE (default for HP9000)	
	-DKERNEL -DPRODUCTION_VERSION -DNATURAL_ALIGNMENT (default for RS/6000)	
	-DKERNEL -DPRODUCTION_VERSION -DNATURAL_ALIGNMENT -D_SUN-SOURCE (default for Sun)	

Setting	Value	Purpose
CompilerFlags=	-Aa +w1 +z -c (default for HP9000) -qalign=natural -qflag=I:I -c (default for RS/6000) -qspill=1024 -misalign -KPIC (default for Sun)	Machine dependent. Valid compiler flags.  The spill flag sets the stack space when business functions are compiled. J.D. Edwards has found that 1024 is adequate to compile the delivered business functions.
OSReleaseLevel=	+DAportable (for HP-UX only) -q32 (for AIX)	The release level to which you are compiling. You should not change these flags.

Setting	Value	Purpose
LinkFlags=	-b -z -ljdesaw -L/usr/ jdedwardsoneworld/BDEV/sys tem/lib (default for HP9000) -b -z -B symbolic -ljdesaw	Machine dependent. These flags are used when linking business functions, including linking them to the jdesaw system shared library. You should not change these flags.
	-L/usr/jdedwardsoneworld/ BDEV/system/lib (HP9000 only) -B symbolic -ljdesaw -L/usr/ jdedwardsoneworld/BDEV/	The -b -z -B symbolic setting tells the HP linker to always resolve symbols (calls to functions) in the same library from where they are referenced, if possible. This prevents a call from one library going to another library of the same name in a
	jdedwardsoneworld/BDEV/system/lib (HP9000 only)  -bI:/usr/oneworld/BDEV/b733 /system/bin32/funclist.imp -bM:SRE -bexpall -brtl -lc -bnoentry -LL/usr//jdedwardsoneworld/B DEV/b733/system/lib -lm -ljdelib -lcallobj -lerror -lgentext -ljdb -ljde_erk -ljdecache -ljdecache -ljdeddapi -ljdeknet -ljderepl -ljdeschr -ljdesec -ljdespec -ljdetam -llanguage -lmisc -lpackage -lport -lrdbapi -lruntime -lsrc -ltransmon -lube -lworkflow -ljdenet -bloadmap:loadmap -ljdesaw (default for RS/6000)  -bl:/usr//jdedwardsoneworld/ BDEV/b733/system/bin32/func list.imp -bM:SRE -bexpall -brtl -lc -lm -bnoentry -LL/usr//jdedwardsoneworld/B DEV/b733/system/lib -lm -ljdelib -lcallobj -lerror -lgentext -ljdb -ljde_erk -ljdecache -ljdecache -ljdeddapi -ljdeknet -ljderepl -ljdeschr -ljdesec -ljdespec -ljdetam -llanguage -lmisc -lpackage -lport -lrdbapi -lruntime -lsrc -ltransmon -lube -lworkflow -ljdenet -lowver -bloadmap:loadmap -ljdesaw (default for AIX)  -G -L\$ -ljdesaw (ORACLE_HOME)/lib	going to another library of the same name in a different path code.  The -B symbolic setting insures that when a shared library is built, function calls found in it are resolved in the same library, if possible.  The settings -ljdesaw and -L/usr/jdedwardsoneworld/BDEV/system/lib settings need to be added before any business function build where a business function links to a function in the system library libjdesaw.sx.
	-G -L\$ -ljdesaw	

Setting	Value	Purpose
LinkLibraries=	blank (default)	Libraries to which business functions are linked. (Windows NT and AS/400 servers only.)
SimultaneousBuilds=		Indicates the number of DLLs that can be built at a time. A value of 0 means that all DLLs will be built simultaneously.

## [CLUSTER]

Setting	Typical Value	Purpose
Primary Node=	server name	When clustering is used with OneWorld, this setting specifies either a primary server where OneWorld will run, or a floating IP address name.  This setting is delivered "commented out."

#### [DB SYSTEM SETTINGS]

The settings in this section contain information about the default environment and path code. A directory must reside on the workstation that has the same name as the default path code shown in its jde.ini file. The name of the server can also be found in this section.

Setting	Value	Purpose
Version=	43	A version number to prevent a mismatch of the jde.ini file with the running version of OneWorld.
Default User=	JDESVR	The user account name for the database bootstrap tables.
Default Pwd=		The user account password for the database bootstrap tables.
Default Env=	PDEVHP02 (default for HP9000)	The default data source on the workstation or the enterprise server.
	PDEVRS02 (default for RS/6000)	
Default PathCode=	PROD	The subdirectory under \\$PKG under which the business function code is stored.
Base Datasource=	ORACLE SVR	The data source representing the database from which logon information is retrieved.
Object Owner=	JDESVR	The owner of system database tables.
Server=	server name	The server on which the database resides.
Database=	hp9000adevl	The database connect string where the system tables reside.

Setting Value		Purpose	
Load Library=	libora73.sl (default for HP9000) libora80.so (default for RS/6000 and Sun)	The JDE driver used to access the database that stores the system tables. This depends on the database to be used and the type of system running OneWorld.	
Decimal Shift=	Y (default) or N	A flag to indicate if decimal shifting is used for numeric data.	
Julian Dates=	Y (default) or N	A flag to indicate if dates are stored in Julian or database-specific format.	
Use Owner=	Y (default) or N	A flag to indicate that table names are to qualified by owner.	
Secured=	Y (default) or N	Indicates whether this is a secured database requiring a user and password login.	
Type=	O (default), A, S, I	A single character denoting the type of database that stores the system tables. These can be O (Oracle), A (MS Access), S (SQL Server), or I (Client Access, AS/400).	
LibraryList=	blank (default)	AS/400 only. The database server that stores the system tables.	
TriggerLibrary=	JDBTRIG (default)	AS/400 only. The database library that stores the system tables.	

# [DEBUG]

The settings in this section determine the location of the jde.log and jdedebug.log. The settings are also used to turn your jdedebug.log on and off.

Setting	Typical Value	Purpose
Output=	FILE	Controls the status of the jdedebug file. Valid values are:
		NONE. No trace information is written to jdedebug.log.
		FILE. Database and runtime trace information is written to the file specified by the DebugFile= parameter in the [DEBUG] section.
		EXCFILE. Runtime trace information is written to the file specified by the DebugFile= parameter in the [DEBUG] section.
		BOTH. Trace information is written to both jde.log and jdedebug.log.
Trace=	TRUE	Writes additional trace information to the log files to aid in debugging.

Setting	Typical Value	Purpose
ClientLog=	1 (default) or 0	A 1 enables servicing of business functions JDE.LOG and JDEDEBUG.LOG entries from the server to the workstation. A 0 disables this service.
DebugFile=	jdedebug.log	The location and name of the jdedebug.log file.
JobFile=	jde.log	The location and name of the jde.log file.
LogErrors=	1	
JDETSFile=	JDETS.log	Specifies the location of the lock manager trace file.
RepTrace=	1	Enables replication of log messages.

## [INSTALL]

The settings in this section contain directory paths and general installation information.

Setting	Typical Value	Purpose
DefaultSystem=	system	The name of the subdirectory under b7 that contains the OneWorld foundation code and tools.
ClientPath=	client	The name of the directory on the deployment server that contains the Workstation install program and other files used during deployment.
PackagePath=	package	The name of the subdirectory on the deployment server under a path code that contains the packages built for that path code.
DataPath=	data	The name of the subdirectory on the deployment server under the path code that contains the Access database delivered for all packages for that path code.
B733=	/usr//jdedwardsonewor ld/b733	Base path of the OneWorld installation.
Double_Byte=	0	
LocalCodeSet=	WE_ISO88591	A setting used to determine alternate language usage. See <i>Language Overview</i> in the <i>OneWorld Upgrade Guide</i> (B73.3.3) for other values.

# [JDEIPC]

Setting	Typical Value	Purpose
ipcTrace=		Set to 1 to enable IPC logging messages. <b>Caution:</b> This setting can cause the log files to grow very fast.

maxNumberOfSemaphores =	200 (default for HP9000 and Sun)	Not delivered for the RS/6000.
startIPCKeyValue	7999	Delivered "commented out."  On UNIX, this is the value of the IPC ID which JDEIPC uses for its shared memory. This value, plus the maxNumberOfResources, defines the range of IPC IDs that JDE will use on the system. System Administrators should ensure that this range of IDs is not used by any other software. Although JDEIPC will not use an existing ID in its range, this might not be true of other software.

# [JDEMAIL]

Setting	Typical Value	Purpose	
mailServer=	owsmtp.jdedwards.com	edwards.com The domain name of the SMTP server to be	
		accessed for sending server mail messages.	

#### [JDENET]

Setting	Typical Value	Purpose	
serviceNameListen=	jde_server	The port number or service name used by OneWorld to communicate with clients and other servers.	
serviceNameConnect=	jde_server	The port number or service name used by OneWorld to communicate with clients and other servers.	
maxNetProcesses=	1	Defines the maximum number of JDENET_N processes that can be running. You can increase the value for a server that is expecting heavy JDENET message flow.	
maxNetConnections=	1250 (default for HP9000) 800 (default for RS/6000)	The total number of connections that all JDENET_N processes can handle. This value is platform-specific. You can increase the value for a server that is expecting to handle larger number of workstations at the same time.	
maxKernelProcesses=	50	The maximum number of JDENET_K processes that can be running. The value should be greater than all of the values added together in maxNumberOfProcesses for all the dedicated servers.	
maxKernelRanges=	13	The number of dedicated server types	
maxLenInlineData=	1024	For internal use only.	
maxLenFixedData=	4096	For internal use only.	
maxFixedDataPackets=	1024	For internal use only.	
netTrace=	1	Enables JDENET log messages.	
kernelDelay=	0	For internal use only.	

Setting	Typical Value	Purpose
HandleKrnlSignals=	1	Turns on and off the handling of signals that are delivered to the process. Kernel processes read the setting on startup. Parameter value of 1 turns on handling, which means that that the kernel process handles the signal, performs some cleanup tasks, and exits. Parameter value of 0 turns of signal handling. With a value of 0, when signals are delivered to a process, the process writes out a core file. The core file contains data that developers can use to determine the cause and location of the signal. Use the parameter value of 0 for debugging purposes.
		Once OneWorld service has started, only processes started after you make a change to this setting will be affected.
netCoreDump=	0	For internal use only. Not delivered with the RS/6000.
netTemporaryDir=	temporary file directory	Sets the directory to use for OneWorld temporary files.
newProcessThreshold Connects=	0	

#### [JDENET\_KERNEL\_DEFx]

This section defines internal dedicated server processes for JDENET. The sections are numbered JDENET\_KERNEL\_DEF1 to JDENET\_KERNEL\_DEF12.

The settings in these sections should not be changed except where noted below.

Setting	Value	Purpose
bAllowOneUserOnly=	1	Parameter value of 1 means that one-user-only kernel processes are allowed on client workstations. The default is to allow one-user-only kernel processing. Add the setting only for CallObject kernel processes:  [JDENET KERNEL DEF6]
		bAllowOneUserOnly=1
		Setting must be added in conjunction with adding a [JDENET_KERNEL_DEFx]
		bOneUserOnly=1 section to the client workstation jde.ini file.

krnlName	DEF1: JDENET RESERVED KERNEL	DEF1: Used for internal purposes and testing.
	DEF2: UBE KERNEL	DEF2: Processes OneWorld batch process requests.
	DEF3: REPLICATION KERNEL	
	DEF4: SECURITY KERNEL	DEF3: Processes data replication requests.
	DEF5: LOCK MANAGER KERNEL	DEF4: Processes security server
	DEF6: CALL OBJECT KERNEL	requests.
	DEF7: JDBNET KERNEL	DEF5: Processes transaction
	DEF8: PACKAGE INSTALL KERNEL	manager and lock manager requests.
	DEF9: SAW KERNEL	DEF6: Processes requests for remote master business functions
	DEF10: SCHEDULER KERNEL	(MBF).
	DEF11: PACKAGE BUILD KERNEL	DEF7: Processes JDBNet server-to-server requests.
	DEF12: UBE SUBSYSTEM KERNEL	DEF8: Processes package installation requests.
		DEF9: Processes SAW application requests.
		DEF10: Processes Scheduler application requests.
		DEF11: Processes package build requests.
		DEF12: Processes UBE subsystem requests.

dispatchDLLName	DEE1, libidanat al (dafault for	Identifies the name of the
dispatchDLLName=	DEF1: libjdenet.sl (default for HP9000) or libjdenet.so (default for RS/6000 and Sun)	JDENET service program.
	DEF2: libjdeknet.sl (default for HP9000) or libjdeknet.so (default for RS/6000 and Sun)	
	DEF3: libjderepl.sl (default for HP9000) or libjderepl.so (default for RS/6000 and Sun)	
	DEF4: libjdeknet.sl (default for HP9000) or libjdeknet.so (default for RS/6000 and Sun)	
	DEF5: libtransmon.sl (default for HP9000) or libtransmon.so (default for RS/6000 and Sun)	
	DEF6: libjdeknet.sl (default for HP9000) or libjdeknet.so (default for RS/6000 and Sun)	
	DEF7: libjdeknet.sl (default for HP9000) or libjdeknet.so (default for RS/6000 and Sun)	
	DEF8: libjdeknet.sl (default for HP9000) or libjdeknet.so (default for RS/6000 and Sun)	
	DEF9: libjdesaw.sl (default for HP9000) or libjdesaw.so (default for RS/6000 and Sun)	
	DEF10: libjdeschr.sl (default for HP9000) or libjdeschr.so (default for RS/6000 and Sun)	
	DEF11: libjdeknet.sl (default for HP9000) or libjdeknet.so (default for RS/6000 and Sun)	
	DEF12: jdekern.sl (default for HP9000 and Sun) or libjdeknet.so (default for RS/6000)	

dispatchDLLFunction=	DEF1: JDENET Dispatch Message	The name of the JDENET
	DEF2: JDEK_DispatchUBEMessage	function for handling JDENET messages. The dispatchDLLName and dispatchDLLFunction entries
	DEF3: DispatchRepMessage	are platform specific.
	DEF4: JDEK_DispatchSecurity	
	DEF5: TM_DispatchTransactionManager	
	DEF6: JDEK_DispatchCallObject Message	
	DEF7: JDEK_DispatchJDBNETMessage	
	DEF8: JDEK_DispatchPkgInstallMessage	
	DEF9: JDEK_DispatchSAWMessage	
	DEF10: JDEK_DispatchScheduler	
	DEF11: JDEK_DispatchPkgBuildMessage	
	DEF12: JDEK_DispatchUBESBSMessage	
maxNumberOfProcesses=	1	The maximum number of kernel processes that can be run on this server for each kernel type. The user can modify this setting to tune performance. The default value is 1 for all JDENET_KERNEL_DEF sections.
numberOfAutoStartProcesses=	0	The number of kernel processes that will automatically start for each kernel type. If this number is 0, then no processes will start automatically for that kernel type. This number must be less than the maximum number of processes for that kernel type. The user can modify this setting to tune performance. The default value is 0 for all JDENET KERNEL DEF sections.

#### [LOCK MANAGER]

Setting	Typical Value	Purpose
Server=	server name	This setting indicates the lock manager server to be used to process records. The value for this setting is the name of the server acting as the lock manager.
AvailableService=	TS	This setting indicates the service that the lock manager server is offering. It is also used to indicate whether the lock manager server is on or off. Valid values are TS and NONE.
RequestedService=	TS	This setting indicates the type of service that the workstation requests from the server. The service that is currently being provided by servers is time stamping (TS) only. Valid values are TS and NONE.

#### [MEMORY DEBUG]

Setting	Typical Value	Purpose
Frequency=	10000	
Full=	1	

#### [NETWORK QUEUE SETTINGS]

The settings in this section contain the name of the queue that is used when running batch jobs on the server. The settings also show the workstation's UBE priority and whether to hold the jobs in a spool file or immediately send them to a printer.

Setting	Typical Value	Purpose
UBE Semaphore Key=	3600	
DefaultPrinterOUTQ=	printer name	The default printer to which batch applications will be routed.
OutputDirectory=	directory name	The directory where you want to create the PrintQueue directory.
JDENETTimeout=	60	The timeout value, listed in seconds, for clients to attempt to connect to the server. A server can act as a client when it uses JDBNET, submits UBEs to another server, calls a business function on another server, uses a Lock Manager on another server, or when it makes security server requests to another server.

#### [SECURITY]

Setting	Typical Value	Purpose
User=	JDESVR	The OneWorld user.
Password=	JDESVR	The OneWorld password.
DefaultEnvironment=	PDEVHP02 (default for HP9000)	Defines a valid environment in which the path code defines F98OWSEC.
	PDEVRS02 (default for RS/6000)	
DataSource=	ORACLE PVC B733	The name of the OneWorld data source that contains the security tables.
SecurityServer=	server name	The name of the server that provides security services. Usually this corresponds to the current host.
ServerPswdFile=	TRUE	The setting of this parameter determines whether OneWorld uses special password handling for batch reports running on the server. Set the value to TRUE to instruct OneWorld to enable special handling of passwords. Set the value to FALSE to disable special handling.
		When OneWorld runs a batch report on the server, it runs the report using a string of line commands and parameters that include the "user password." Under some operating systems, you can query the status of a job and view the parameters that were used to start the process.
		As a security measure, you can enable special handling by OneWorld. When enabled, OneWorld does not include the "user password" in the parameter list for a batch process. Instead, it includes the name of a file that contains the "user password". OneWorld instructs the operating system to destroy this file as soon as the batch report reads the password.
History=	0	

#### [SERVER ENVIRONMENT MAP]

Setting	Typical Value	Purpose
ServerName=	environment	Each setting in this section lists the environment to which
	name	each server is mapped.

### [SVR]

The settings in this section contain environment and subdirectory information.

Setting	Typical Value	Purpose
EnvType=	1	Used by JDEKRNL
EnvironmentName=	PDEVHP02 (default for HP9000)	
	PDEVRS02 (default for RS/6000)	
SpecPath=	spec	This line and all of the following in this section specify the path names so other OneWorld source programs know where to look for files. For instance, if "spec" were ever to be changed to "specifications", changing SpecPath would allow changes to be made quickly. This value is not updated by any program or process. The only reason to change this is aesthetic. This is the subdirectory under the path code user to store the replicated set of specification files on the workstation.
SourcePath=	source	
ObjectPath=	obj	
HeaderPath=	include	
HeaderVPath=	includev	
BinPath=	bin32	
LibPath=	lib32	
LibVPath=	libv32	
MakePath=	make	
WorkPath=	work	
CodeGeneratorPath=	cg	
ResourcePath=	res	
HelpPath=	helps	
NextIDPath=	nextid	
LibraryListName=	PDEVHP02 (default for HP9000)	
	PDEVRS02 (default for RS/6000)	

#### [TAM]

Setting	Value	Purpose
TAMTraceLevel	0	

## [UBE]

The settings in this section determine whether the jdedebug.log is on or off. This setting also determines the level of debugging.

Setting	Value	Purpose
UBEDebugLevel	0 (default), 1, 2, 3, 4, 5, or 6	Used to specify what level of debugging information will be provided when using UBE debug logging. 6 is the highest level of logging information.
		0 = Error messages only
		1 = Informative messages
		2 = Section-level messages
		3 = Object-level messages
		4 = Event rules messages
		5 = SQL statements
		6 = UBE function messages

## [WORKFLOW]

Setting	Value	Purpose
Asynchronous Workflow=		Used to turn on and off asynchronous workflow. The default value is FALSE.

# Understanding Windows NT Enterprise Server jde.ini Settings

This section describes in detail the settings found in the OneWorld Windows NT enterprise server jde.ini file. Information is organized by section, such as [DEBUG]. Sections are alphabetized, but settings found within sections are generally listed in the order in which they are found in the software. For cases when defaults for Intel and Compaq AlphaServer processors differ, the two values are labeled.

#### [BSFN BUILD]

Setting	Value	Purpose
DoCompression=	0	Used to compress server packages for redeployment to other servers of the same platform type. This setting saves you from having to build a package on each server. The default setting, 0, means do not use compression. 1 means use compression.
BuildArea=	Z: \OneWorld\b733\ddp \packages	The location on the server where the Package Name directory will be created and the package built.
DebugFlags=	/Gz /Od /Zi /MDd /Yd /W4 /GX /Gy /D"_DEBUG"	Machine dependent. These compile flags are used when building business functions in "debug" mode. You should not change these flags.
OptimizationFlags=	/Gz /O2 /MD /W4 /GX /Gy	Machine dependent. These compile flags are used when building business functions in "release/optimize" mode. You should not change these flags.
OSReleaseLevel=	5.0	The Windows NT server release level to which you are compiling. You should not change this flag.
DefineFlags=	/D "WIN32" /D "_WINDOWS" /D "IAMASERVER" /D "KERNEL"	Machine dependent. These compile flags are used when linking business functions. You should not change these flags.
CompilerFlags=	/nologo /c	Machine dependent. These compile flags are used when linking business functions. You should not change these flags.

Setting	Value	Purpose
LinkFlags=	/DLL /DEBUG /SUBSYSTEM:windows /FORCE:MULTIPLE /FORCE:UNRESOLVED /INCREMENTAL:YES /VERBOSE /MAP	Machine dependent. These flags are used when linking business functions. You should not change these flags.
LinkLibraries=	jdekrnl.lib, jdel.lib, jdenet.lib, jdeipc.lib	Libraries to which business functions are linked.
SimultaneousBuilds=	0	Indicates the number of processes that are started for the business function build. 0 means to run as many build processes as possible.

## [BSFN Builder]

The settings in this section are for J.D. Edwards internal use only.

Setting	Value	Purpose
User=	JDE	OneWorld user ID used to run BSFNBuilder.exe.
Pwd=	JDE	OneWorld user password used to run BSFNBuilder.exe.
PathCode=	appl_pgf	OneWorld pathcode under which BSFNs will be built.
Build Area=	z: \OneWorld\b733 \ddp	The path to the parent directory of the pathcode for the business functions that you are building. This will typically be the same as the base installation directory.
DBSFNFlags=	/Gz /Od /Zi /MDd /Yd /W4 /GX /Gy /Fp\$(PRECOMPHDR) /D "WIN32" /D "_DEBUG" /D "_WINDOWS" /D "IAMASERVER" /D "KERNEL" /nologo /c	Machine-dependent compiler flags used to create debug builds.
RBSFNFlags=	/Gz /O2 /MD /W4 /GX /Gy /Fp\$(PRECOMPHDR) /D "WIN32" /D "NDEBUG" /D "_WINDOWS" /D "IAMASERVER" /D "KERNEL" /nologo /c	Machine-dependent compiler flags used to create release builds.
DLinkFlags=	/DLL /DEBUG /SUBSYSTEM:windows /out:\$(DLLTARGET) /PDB:\$(PDB) /IMPLIB:\$(LIBRARY) /FORCE:MULTIPLE /FORCE:UNRESOLVED /INCREMENTAL:YES /VERBOSE /MAP	Machine-dependent link flags for debug builds.

Setting	Value	Purpose
RLinkFlags=	/DLL /DEBUG /SUBSYSTEM:windows /out:\$(DLLTARGET) /PDB:\$(PDB) /IMPLIB:\$(LIBRARY) /FORCE:MULTIPLE /FORCE:UNRESOLVED /VERBOSE /MAP:\$(MAPTARGET) /OPT:REF	Machine-dependent link flags for release builds.
KeepMake=	0	The status of make files after the build. 0 is the default and means do not keep. 1 means keep.
BFDir=	bsfnerr	Subdirectory under path code that will contain build error logs. The default value is bsfnerr.

#### [DB SYSTEM SETTINGS]

The settings in this section contain information about the default environment and path code. A directory must reside on the enterprise server that has the same name as the default path code shown in its jde.ini file.

Setting	Value	Purpose
Version=	43	A version number to prevent a mismatch of the jde.ini file with a running version of OneWorld. 43 is the only valid value.
Default User=		The OneWorld user ID used to access the bootstrap tables, F986101 and F98611.
Default Pwd=		The OneWorld user password used to access the bootstrap tables.
Default Env=	P733HPO1	The environment used in situations where an environment is not specified.
Default PathCode=	PROD	The default path code. The specification files for the bootstrap tables will then be read from the spec subdirectory of this pathcode folder.
Server=	hp9000a	The server where the bootstrap tables are located. This value is ignored except when jdbnet is used.
Type=	O, A, S, I	The database type where the bootstrap tables reside. These can be O (Oracle), A (MS Access), S (SQL Server), or I (Client Access).

## [DEBUG]

The settings in this section determine the location of the jde.log and jdedebug.log. The settings are also used to turn logging on and off.

Setting	Typical Value	Purpose
DebugFile=	z: \OneWorld\b733 \ddp\log \jdedebug.log	The path and name of the log file used to write debug tracing information. The process ID will be added before the period in this file name.
JobFile=	z: \OneWorld\b733 \ddp\log\jde.log	The path and name of the log file used to write job error and warning information. The process ID will be added before the period in this file name.
Output=	FILE	Controls how tracing information is written. Valid values are:
		NONE. The default setting. No trace information is written to DebugFile.
		FILE. Database and runtime information is written to DebugFile.
		AUX. Tracing information is written to the program debugger output window.
		BOTH. Tracing information is written to both DebugFile and the program debugger output window.
JDETSFile=	z: \OneWorld\b733 \ddp\log\jdets.log	The path and name of the log file used to write lock manager tracing information.
KeepLogs=	1	Keeps logs for UBEs in the Print Queue directory. Valid values are: 1 to keep the logs created when UBEs are run, and 2 to delete the UBE logs when the UBE is finished processing. Regardless of this setting, logs are kept if an error occurs when processing the UBE.
RepTrace=	0	Controls replication message tracing. Valid values are: 0 (default) to not write replication tracing information to the debug file. !=0 to write replication tracing information to the debug file.
TAMTraceLevel=	0	Controls the amount of TAM information logged to the jdedebug.log. Valid values are 0-10, with higher numbers increasing the amount of information being logged. 0 is the default setting and means no information output.
TAMTrace=	0	Controls TAM file trace information. Valid values are: 0 to not write TAM trace information to the debug file, and 1 to write TAM trace information to the debug file.
ClientLog=	0	Sends log information to the client and merges it with the client's jde.log and jdedebug.log files. Valid values are: 0 to not send log information to the client, and 1 to send log information to the client.
QKLog=	0	Controls JDE Queue Kernel tracing information. Valid values are: 0 to not write Queue Kernel message information to the debug file, or 1 to write Queue Kernel message information to the debug file.

Setting	Typical Value	Purpose
TraceRowSecurityFetch=	FALSE	Controls row level security tracing. Valid values are FALSE (default) to turn off tracing, or TRUE to turn on tracing.
WTSLogs=	FALSE	Creates logs in the User Profile directory for TSE installations. Valid values are: FALSE (default) to set the log file paths by the JobFile and DebugFile, or TRUE to write the log files to c:\WTSRV\Profiles\%Userid%\Windows.
jdelibFatal=	FALSE	Determines whether message boxes are supported. Valid values are: FALSE (default) where message boxes are not supported, and TRUE where message boxes are supported.
TAMMultiUserOn=	0	Determines whether multiuser access to TAM files is allowed. Valid values are: 0 (default) or -1 to not allow multiuser access or 1 to allow multiuser access.
TAMErrorMsgBox=	0	Controls whether TAM error messages open a message box. Valid values are: 0 (default) to not write fatal error messages to a message box, and 1 to write fatal error messages to a message box.

## [INSTALL]

The settings in this section contain directory paths and general installation information.

Setting	Typical Value	Purpose
B733=	\JDEdwards OneWorld\B733\ddp	The path to the OneWorld base installation directory.
LocalCodeSet=	WE_ISO88591	Determines the character code set used by OneWorld. Valid values are:
		WE_ISO88591 (1252) - English
		JA_SJIS (932) - Japanese
		TC_BIG5 (950) - Traditional Chinese
		SC_GB (936) - Simplified Chinese
		KO_KSC (949) - Korean
StartServicePrefix	JDE B733	Uniquely identifies OneWorld services to a single installation. The prefix tags OneWorld services when running parallel releases on a single server. The default value is JDE.
DefaultSystem	system	The name of the System directory. The default value is system. Do not change this value.
Double_Byte	0	Indicates if this is a double-byte installation. 0 (default) means no and 1 means yes.

Setting	Typical Value	Purpose
POSTSCRIPT_ONLY	0	Used in conjunction with double-byte to force postscript only. 0 (default) means do not force and 1 means to force.
bCacheLocalCodeSet	1	Used to retrieve the code page for the current process. Valid values are: 1 (default) to use the 1252 English code set, <0 to use 1252 (English), =0 to use the code page found in [INSTALL] LocalCodeSet in the jde.ini file, or >0 to use the code page already in effect.

## [JDE\_CG]

Setting	Typical Value	Purpose
TARGET=	RELEASE	The type of build used to compile objects. Valid values are: RELEASE (default) to build using release mode and DEBUG to build using debug mode.
INCLUDES=	c:\msdev\devstudio\vc\include	The path to Microsoft Visual C++, OneWorld system, and OneWorld pathcode include (header) files.
LIBS=	c:\msdev\devstudio\vc\l ib	The path to Microsoft Visual C++, OneWorld system, and OneWorld pathcode library files.
MAKEDIR=	c:\msdev\devstudio\vc \bin	The path to the directories of Microsoft Visual C++ programs.
STDLIBDIR=	c:\msdev\devstudio\vc \lib	The path to directories of Microsoft Visual C++ libraries.
ServerPackage Sleep=	60	The wait time, in seconds, between status checks of server package builds. The default value is 60.

## [JDEIPC]

Setting	Typical Value	Purpose
ipcTrace=	0	Controls the number of interprocess communications (IPC) written to the jdedebug.log. Valid values are: 0 (default) to write no messages to the log, 1 to write only general trace messages to the log, 2 to write IPC handle state trace messages to the log, and 3 to write both general and IPC handle state trace messages to the log.
CLSID=	a unique number	This class ID string is used by the ipcsrv process for registry settings. If running multiple instances of OneWorld on the same enterprise server, each OneWorld instance should have a unique value.
startIPCKeyValue=	7001	An integer offset used to separate globally shared memory when running multiple instances of OneWorld. The values of these keys for each instance of OneWorld must differ by at least the value of maxNumberOfResources. The default value is 5000.

maxNumberOfResources=	1000	The maximum number of IPC resources that the OneWorld instance will use. When this value is reached, no more IPC resources can be created. The default value is 1000.
maxNumberOfSemaphores =	100	The maximum number of semaphore resources that OneWorld will use. When this value is reached, no more semaphore resources can be created. On Windows NT, two semaphore resources are used to implement each message queue. The default value is 100.
maxMsgqMsgBytes=	2048	The maximum number of bytes in a message to be put on a message queue. The default value is 2048 (2K).
maxMsgqEntries=	1024	The maximum number of messages that can be on a message queue at one time. The default value is 1024.
maxMsgqBytes=	65536	The maximum number of bytes that can be on a message queue at one time. The default value is 65536 (64K).

## [JDEMAIL]

Setting	Typical Value	Purpose
mailServer=	owsmtp.jdedwards.com	The domain name of the SMTP server to be accessed for sending server mail messages.
RuleN=	HANDLER: DATA	The SMTP e-mail configuration rules taken from table F90005. Any empty or invalid entry is considered the end of the list. "N" is a positive integer starting at 1. See more information on these rules in the documentation for how to set up SMTP e-mail.

## [JDENET]

Setting	Typical Value	Purpose
serviceNameListen=	6003 or jde_server	The TCP/IP port number used for receiving communications packets. If this value is an integer, that number is used as the port. If this value is a character string, it will be translated via the file c:\winnt\system32 \drivers\etc\services into a port number and tranport protocol. The default value is 6003.
serviceNameConnect=	6004 or jde_server	The TCP/IP port number used for sending communications packets. If this value is an integer, that number is used as the port. If this value is a character string, it will be translated via the file c:\winnt \system32\drivers\etc\services into a port number and tranport protocol. The default value is jde_server.

Setting	Typical Value	Purpose
maxNetConnections=	100	The maximum number of connections for all jdesnet and jdenet_n processes that are running. The default value is 100.
maxKernelRanges=	13	The maximum number of kernel types and ranges that will be used.
netHostName=		The IP address to use if multiple network cards are used on the server.
ServiceControlRefresh=	1	The rate in seconds at which the Jdesctrl program refreshes its status of the services. Jdesctrl can be used instead of the Services applet to start, stop, pause, and continue OneWorld net and queue services on Windows NT enterprise servers. The default value is 1.
enablePredefinedPorts=	0	Allows OneWorld net to use a predefined range of TCP/IP ports. This is required to permit the OneWorld Java server to be outside a firewall. This port range starts at the port number specified by serviceNameListen and ends at the port calculated by the equation serviceNameListen + maxNetProcesses - 1. The value 0 (default) means do not use a predefined range of ports. Set the value at 1 and restart the server if you set the server up behind a firewall.
PreConnectHosts=	0	The number of enterprise servers that will be initialized. This initialization allows the enterprise servers listed in the keys "PreConnectHost1", "PreConnectHost2", and so on, to load their bootstrap tables, thereby improving the response time when task requests are actually sent to these servers.
PreConnectHostN=	EntServer1	The name of enterprise servers which will be initialized. "N" is a positive integer starting at 1.
netTemporaryDir=	Variable	Allows the Server Administration (SAW) Workbench to create, transfer, and remove temporary log files larger than 5 MB. The variable should be the name of the temporary directory SAW uses to accomplish these tasks.

## [JDENET\_KERNEL\_DEFx]

This section defines JDENET internal dedicated server processes. The sections are numbered JDENET\_KERNEL\_DEF1 to JDENET\_KERNEL\_DEFN where *N* is

equal to the value of maxKernelRanges. The settings in these sections should not be changed except where noted below.

Setting	Value	Purpose
bAllowOneUserOnly=	1	Parameter value of 1 means that one-user-only kernel processes are allowed on client workstations. The default is to allow one-user-only kernel processing. Add the setting only for
		CallObject kernel processes:  [JDENET_KERNEL_DEF6] bAllowOneUserOnly=1
		Setting must be added in conjunction with adding a [JDENET_KERNEL_DEFx]
		bOneUserOnly=1 section to the client workstation jde.ini file.
		The number of one-user-only kernels is calculated as follows: maxKernelProcesses (set in the [JDENET section of the server jde.ini file) minus the sum of the individual maxNumberOfProcesses
		maxNumberOfProcesse values.

krnlName	DEF1: JDENET RESERVED KERNEL	DEF1: Used for internal
	DEF2: UBE KERNEL	purposes.
	DEF3: REPLICATION KERNEL	DEF2: Processes OneWorld batch requests.
	DEF4: SECURITY KERNEL	DEF3: Processes data
	DEF5: LOCK MANAGER KERNEL	replication requests.
	DEF6: CALL OBJECT KERNEL	DEF4: Processes security
	DEF7: JDBNET KERNEL	server requests.
	DEF8: PACKAGE INSTALL KERNEL	DEF5: Processes transaction manager and lock manager
	DEF9: SAW KERNEL	requests.
	DEF10: SCHEDULER KERNEL	DEF6: Processes requests
	DEF11: PACKAGE BUILD KERNEL	for remote business functions.
	DEF12: UBE SUBSYSTEM KERNEL	DEF7: Processes JDBNet
	DEF13: WORKFLOW KERNEL	server-to-server requests.
		DEF8: Processes package installation requests (obsolete).
		DEF9: Processes Server Administration Workbench requests.
		DEF10: Processes Secheduler application requests.
		DEF11: Processes package build requests.
		DEF12: Processes UBE subsystem requests.
		DEF13: Processes workflow application requests.

dispatchDLLName=	DEF1: jdenet.dll	This setting determines the
	DEF2: jdekrnl.dll	.DLL used for kernel processes.
	DEF3: jdekrnl.dll	processes.
	DEF4: jdekrnl.dll	
	DEF5: jdekrnl.dll	
	DEF6: jdekrnl.dll	
	DEF7: jdekrnl.dll	
	DEF8: jdekrnl.dll	
	DEF9: jdesaw.dll	
	DEF10: jdekrnl.dll	
	DEF11: jdekrnl.dll	
	DEF12: jdekrnl.dll	
	DEF13: jdekrnl.dll	
dispatchDLLFunction=	DEF1: _JDENET_DispatchMessage@28	The name of the Kernel
	DEF2: _JDEK_DispatchUBEMessage@28	function for handling Kernel request messages.
	DEF3: _JDEK_DispatchRepMessage@28	On Intel processors running
	DEF4: _JDEK_DispatchSecurity@28	Windows NT, the preceding underscore " " and
	DEF5: _JDEK_DispatchTransactionManager@28	following "@28" are
	DEF6: _JDEK_DispatchCallObjectMessage@28	required. On Compaq AlphaServer processors
	DEF7: _JDEK_DispatchJDBNETMessage@28	running Windows NT, the
	DEF8: _JDEK_DispatchPkgInstallMessage@28	preceding underscore "_" and following "@28" are
	DEF9: _JDEK_DispatchSAWMessage@28	omitted.
	DEF10: _JDEK_DispatchScheduler@28	
	DEF11: _JDEK_DispatchPkgBuildMessage@28	
	DEF12: _JDEK_DispatchUBESBSMessage@28	
	DEF13: _JDEK_DispatchWFServerProcess@28	

XMLRequest=	DEF1:	The name of the XML
	DEF2: UBE	request.
	DEF3:	
	DEF4:	
	DEF5:	
	DEF6: CALLMETHOD	
	DEF7:	
	DEF8:	
	DEF9:	
	DEF10:	
	DEF11:	
	DEF12:	
	DEF13:	
maxNumberOfProcesses=	1	The maximum number of kernel processes that can be run on this server for each kernel type. The user can modify this setting to tune performance. The default value is 1 for all JDENET_KERNEL_DEF sections.
numberOfAutoStartProcesses=		The number of kernel processes that will automatically start for each kernel type. If this number is 0, then no processes will start automatically for that kernel type. This number must be less than the maximum number of processes for that kernel type. The user can modify this setting to tune performance. The default value is 0 for all JDENET_KERNEL_DEF sections.

beginningMsgType Range=	DEF1: 0	The beginning message of
	DEF2: 256	the range for each kernel type.
	DEF3: 512	type.
	DEF4: 551	
	DEF5: 601	
	DEF6: 901	
	DEF7: 1201	
	DEF8: 1501	
	DEF9: 2001	
	DEF10: 2501	
	DEF11: 3001	
	DEF12: 3501	
	DEF13: 4001	
	DEF14: 4501	
endingMsgTypeRange=	DEF1: 255	The ending message of the
	DEF2: 511	range for each kernel type.
	DEF3: 550	
	DEF4: 580	
	DEF5: 650	
	DEF6: 1156	
	DEF7: 1456	
	DEF8: 1756	
	DEF9: 2256	
	DEF10: 2756	
	DEF11: 3256	
	DEF12: 3756	
	DEF13: 4256	
	DEF14: 4551	

# [LOCK MANAGER]

Setting	Typical Value	Purpose
Server=	server1	The name of the server which is hosting (making available) the record locking services. This is a type of kernel. Any OneWorld enterprise server can host record locking services.
RequestedService=	TS	The type of service that the local enterprise server's processes are requesting of the OneWorld enterprise server listed in the Server field. Valid value are NONE (default) or TS for time stamping.
AvailableService=	NONE	The type of service that the local enterprise server hosts (makes available). Valid values are NONE (default) or TS for time stamping.
LogServices=	0	Controls lock manager tracing information. Valid values are 0 (default) to not write messages to the file specified in [DEBUG] JDETSFile and 1 to write messages to this file.

## [NETWORK QUEUE SETTINGS]

The settings in this section contain information for starting batch queues.

Setting	Typical Value	Purpose
QEnv=	P733HPO1	The environment for starting batch queues.
QUser=	JDE	The OneWorld user ID for starting batch queues.
QPassword=	JDE	The OneWorld user password for starting batch queues.
QName=	QBATCH	The default queue name if not specified in UBEQueueN, PKGQueueN, or SPCQueueN.
QueueDelay=	30	The time, in seconds, between which the batch queues will search for jobs in the F986110 table. The default value is 5.
JDENETTimeout=	60	The timeout value, listed in seconds, for clients to attempt to connect to the server. A server can act as a client when it uses JDBNET, submits UBEs to another server, calls a business function on another server, uses a Lock Manager on another server, or when it makes security server requests to another server.
UBEQueues=	1	The total number of batch queues devoted to handling UBE requests. Set the value at 2 if you launch a subsystem UBE to run on the server. This will allow the subsystem UBE to run in one queue while normal UBEs can run in a separate queue. This is necessary because the subsystem UBE goes into a permanent processing mode and consumes all other UBEs in the queue.

Setting	Typical Value	Purpose
UBEQueueN=	QBATCH	The name(s) of the UBE batch queue(s). "N" ranges from 1 to the value of UBEQueues.
SpecInstallQueues=	1	The total number of batch queues devoted to handling spec file installation requests. The default value is 1.
SpcQueues=	QBATCH	The name(s) of the specification installation queues. "N" ranges from 1 to the value of SpcQueues.
KillImmediate=	1	The action of the shutdown process. Valid values are 0 to allow batch queue processes to finish their current task after receiving a shutdown request or 1 (default) to stop queue processes immediately upon receiving a shutdown request.
OutputDirectory=	z: \OneWorld\b733 \ddp	The parent directory for the PrintQueue directory where job files (in .pdf format) are located.

## [NLS]

Setting	Typical Value	Purpose
RemoteCodeSet=	1252	The code page that was in effect when specification files were packed. The default is 1252 (English).
LocalCodeSet=		The code page that will be in effect when packed specification files are unpacked. The default is 1252 (English).

## [SECURITY]

Setting	Typical Value	Purpose
SecurityServer=	server1	The server hosting the security services. Any server running OneWorld services can host security server services.
User=	JDE	The database account used to access the security table (F98OWSEC).
Password=	JDE	The database account password used to access the security table (F98OWSEC).
DefaultEnvironment=	JDEOPT32	The default environment in which the security kernel will run.
DataSource=	System - B7333	The data source where the security table (F98OWSEC) can be found. The default value is System - B7333.
SecurityMode=	0, 1, or 2	Controls whether OneWorld accepts a standard logon, unified logon, or both. Valid values are 0 (default) to accept only the standard logon, 1 to accept only the unified logon, or 2 to accept both.

AllowedUsers=	OneWorld_users, Bowens	A comma-delimited list of user accounts and/or groups of user accounts that are permitted to sign on to Oneworld using unified logon. This allows the users to bypass the OneWorld client sign-on screen.
NumServers=	1	The total number of servers running security services that can validate a connection. The security server request will be sent to each security server in turn until one answers the request or there are no more security servers listed. The default value is 1.
History=	0	Turns on the sign-on security history logging. This information is stored in table F9312.

## [SERVER ENVIRONMENT MAP]

Setting	Typical Value	Purpose
ENV1=		Maps one environment name to another. Wherever ENV1 is to be used on the OneWorld enterprise server, it is replaced by ENV2. Multiple environment mappings may be specified.

## [SVR]

The settings in this section specify path names so that other programs can find source, headers, specifications, and other information.

Setting	Typical Value	Purpose
SpecPath=	spec	The path to TAM files. Do not change
SourcePath=	source	The path to business function source files. Do not change.
ObjectPath=	obj	The path to business function object files. Do not change.
HeaderPath=	include	The path to business function header files. Do not change.
HeaderVPath=	includev	The path to third-party vendor header files. Do not change.
BinPath=	bin32	The path to system and business function executables and DLIs. Do not change.
LibPath=	lib32	The path to system and business function library files. Do not change.
LibVPath=	libv32	The path to third-party vendor library files. Do not change.
MakePath=	make	The path to business function make files. Do not change.
WorkPath=	work	The path to work files. Do not change.
FontPath=	res\fonts	The path to font files. These can be used in creating batch reports.
SysFontPath=	winnt\fonts	The path to Windows NT system font files. These may be used in creating batch reports.

## [UBE]

## [ACTIVE DIRECTORY]

The setting in this section is used when Active Directory is installed.

Setting	Value	Purpose
One exar	Variable. Typically use a version of OneWorld running on the server, for example JD_EDWARDS_ONEWORLD_B733_SP12.	Identfies the Service Connection Point (SCP) object in Active Directory. When a user signs on to OneWorld, OneWorld searches Active Directory for an SCP object with a service name that matches the parameter value in the [ACTIVE DIRECTORY] section of the workstation jde.ini file. OneWorld chooses an SCP object whose status is "running" and retrieves the server name and port number, enabling the workstation to make a connection to the server.
		If you move OneWorld service from one server to another or change the service port number, no changes to the workstation jde.ini file are needed, so long as the name of the SCP object in Active Directory and the parameter values of the [ACTIVE DIRECTORY] section of the workstation jde.ini file match.

## Understanding Server jde.ini Settings for WebSphere

This section details the settings found in the OneWorld enterprise server jde.ini file as needed to run WebSphere third-party software. The information in this chapter supplements the information for the platform specific-chapters in this section. Information within this chapter is organized by section, such as [JDENET]. Sections are alphabetized, but settings found within sections are generally listed in the order they are found in the software.

#### See Also

- Installation Guide J.D. Edwards Integrator to Storefronts
- Installation Guide J.D. Edwards Storefront (Powered by IBM WebSphere Commerce Suite)

#### [JDENET]

Setting	Typical Value	Purpose
maxKernelRanges=		The maximum number of kernel types and ranges that will be used. Make sure this number is updated to next number.

#### [JDENET\_KERNEL\_DEF13]

This section defines JDENET internal dedicated server processes.

Setting	Typical Value	Purpose
krnlName=	MQSI Kernel	
beginningMsgTypeRange=	5513	The beginning message of the range for each kernel type.
endingMsgTypeRange=	6001	The ending message of the range for each kernel type.
dispatchDLLName=	mqsadapt.dll	This setting determines the .DLL used for kernel processes.
dispatchDLLFunction=	_JDEK_DispatchMQ SeriesProcess@28	The name of the Kernel function for handling Kernel request messages.

maxNumberOfProcesses=	The maximum number of kernel processes that can be run on this server for each kernel type.	
numberOfAutoStartProcesses=	The number of kernel processes that will automatically start for each kernel type. Verify that this value is 1.	

### [MQSI]

The settings in this section are for the header information on the message that is required for Commerce Integrator. If the adapter is being used without Net Commerce/Commerce Integrator, the create header is "No" and the following jde.ini settings would be blank, except for the OWHostName.

Setting	Typical Value	Purpose
QMGRName=	JDE_QMGR	MQ Series queue manager.
QInboundName=	INBOUND.Q	MQ Series inbound message queue name. This queue is used to place incoming MQ Series messages.
QErrorName=	DEFRES.Q	MQ Series default response queue name. This queue is used if a success and failure destination is not provided in the incoming message.
QOutboundName=	OUTBOUND.Q	MQ Series outbound queue name. This queue is used to place outbound MQ Series messages.
TimeoutWaitInterval=	15	Timeout wait interval for the kernel processing.
MaxBufferLength=	10240	The maximum buffer length of an MQ Series message.
CreateHeader=	YES	Create special header information in MQ Series message for Commerce Integrator.
AppGroup=	NNJDE	Used with create header.
JDEOrderStatusCode=	JDESOOUT	Used with create header. Transaction type for J.D. Edwards sales order status.
JDECustomerCode=	JDEAB	Used with create header. Transaction type for J.D. Edwards Customer add and update.
JDEItemPriceCode=	JDEPRICE	Used with create header. Transaction type for J.D. Edwards price update.
JDEItemQtyCode=	JDEIL	Used with create header. Transaction type for J.D. Edwards product quantity update.
NCOrderStatusCode=	JDE.IC.F4201Z1	Used with create header. Net commerce order status code.
NCCustomerCode=	JDE.IC.F0101Z2	Used with create header. Net commerce customer add and update code.
NCProductPriceCode=	JDE.IC.F4106NC	Used with create header. Net commerce product quantity update code.

Setting	Typical Value	Purpose
NCProductQtyCode=	JDE.IC.F41021Z1	Used with create header. Net commerce product quantity update code.
OWHostName=		OneWorld host name. Used to create outbound net message. The OWHostName creates the net message to trigger the Outbound Adapter. This is the name of the server on which OneWorld is installed.

OneWorld Xe (09/00) 16–71

## **Understanding Java Server jas.ini Settings**

To configure the jas.ini file you must modify several areas before the OneWorld Java Server can run OneWorld Java and HTML applications. If the OneWorld Java Server installation has created a jas.ini with any sections other than those listed in the table that follows, you must delete them.

The following table summarizes the jas.ini settings used by the OneWorld Java Server:

Setting	Description
[OWWEB]	OneWorld Java Server specific settings. Modify for your environment.
[CACHE]	HTTP session settings
[CONNECTION POOL]	Connection pools manage a group of connections based on data source, userid, and password. The settings allow an administrator to tune the number of connections that should be available. The duration that an unused connection should be retained is provided in the CACHE section. In addition, the pool cleaner process configured within this section provides a scheduled check of a pool's connections at specified intervals.
[JDBC URL]	Specifies the JDBC URL for the Java Persistent Objects. This value overrides the database mappings in the OneWorld Object Configuration Manager (OCM).
[JDBC DRIVERS]	Specifies the JDBC drivers for each database management system. Modify for your environment.
[SERVER COMPONENTS]	Loads OneWorld Java Server packages. Do not modify this section.
[JDENET]	Specifies values for the OneWorld Java Server to communicate with the OneWorld Enterprise Server.

OneWorld Xe (09/00) 16–73

**[SERVER]** Specifies values for the OneWorld Java Server to retrieve

data dictionary error descriptions from the OneWorld

Enterprise Server.

**[LOGS]** Turns on debug logging and specifies the location of log

files.

[DB SYSTEM SETTINGS] Contains startup values for the OneWorld Java Server.

Modify for your environment.

**[SECURITY]** Contains OneWorld security information.

[PORTAL CONFIGURATION]

Contains optional settings for the ActivEra Portal.

## [OWWEB]

Confirm the following settings within the [OWWEB] section:

Parameter	Recommended Setting	Description
PathCodes=	('PRODB733')	The default environment is listed by path code. If there is no value, all available environments will be available to a particular user or group. Each path code is single quoted and separated by commas.
MO QUEUE	c:\JDEdwardsOneWorld\B7333 \jdewww\moqueue	For media objects, point to a valid directory. You might need to create this directory.
ProxyPoolSize=	50	Specifies the socket connection limits of the Java OneWorld proxy server for business function services.
F0005Prefix=	DR	Column prefix for the OneWorld F0005 table.
F0004Prefix=	DT	Column prefix for the OneWorld F0004 table.
OracleTNS=	c:\orant\net80\admin\tnsnames .ora	Specifies the location of the Oracle tnsnames.ora file. Do not assign a value if you are not using Oracle.

MssqlTNS=	x:\JDEdwardsOneWorld\B7333\ jastnsnames.sql	Specifies the location of the tnsnames.sql file. It must be manually created if you are using MS SQL Server. Do not assign a value if you are not using MS SQL Server.
ProxyHost=		Specifies the host name or ip address of the machine on which the JOWProxy is running. The default value is 127.0.0.1 if no value is specified.
ProxyPort=		Specifies the port used to communicate with the JOWProxy process. The default value is 20002 if no value is specified.
MaxUsers=	100	The maximum allowable number of OneWorld web users.
FtpPort=	21	Specifies the port number on which the File Transport protocol service is listening, if you are using FTP to retrieve media objects.
FtpUsr=	Anonymous	Specifies the user ID used to connect to the FTP server, if you are using FTP to retrieve media objects.
FtpPwd=	Anonymous	Specifies the password used to connect to the FTP server, if you are using FTP to retrieve media objects.

OneWorld Xe (09/00) 16–75

UseProxyServer=	FALSE	Defines whether OneWorld Java Server uses ProxyServer functions. Valid values are FALSE amd TRUE.
		Sends JDENET messages directly from the OneWorld JAS Sever and does not employ any proxy server functions if the value is FALSE.
		Sends JDENET messages through the JOWProxy process of the OneWorld client if the value is TRUE. A TRUE setting is not valid for OneWorld Xe.
UseMOWinNTShare=	TRUE	Uses Windows UNC share to retrieve media objects if the value is TRUE. Uses an FTP to retrieve media objects if the value is FALSE.
PrintImmediate=	FALSE	Uses the enterprise server to generate a PDF file only for a UBE job if the value is FALSE. Uses the enterprise server to generate a PDF file and converts the PDF file to Post Script, PDL or Line output for the UBE job if the value is TRUE.
KeepUBE=	TRUE	Saves jde.log and jdedebug. log files when the UBE job is completed if the value is TRUE. Deletes jde.log and jdedebug.log files when the UBE job is completed if the value is FALSE.

UBEQueue=	QBATCH	The batch queue to which UBE jobs are submitted.
OWJRNL=	OWJRNL	This setting is applicable only to OneWorld Java Servers running on AS/400 platforms. If you have manual commit turned on to update the AS/400 DB2 database records, this setting allows the OneWorld Java Server to turn on the JOURNAL for the applicable AS/400 tables.
		The value you specify for this setting must be the name of the library on the AS/400 for the STRJOURNAl stored procedure.

# [CACHE]

Parameter	Recommended Setting	Description
UserSession=	1200000	The time in milliseconds before an inactive user session cache will be cleaned up.
UserProfile=	1200000	The time in milliseconds before a user profile cache will be cleaned up. J.D. Edwards recommends using the default value.
ViewTable=	1200000	The time in milliseconds before an inactive view table cache will be cleaned up. J.D. Edwards recommends using the default value.
ResultSet=	60000	The time in milliseconds before an inactive result set cache will be cleaned up. J.D. Edwards recommends using the default setting.
Connection=	1800000	The time in milliseconds before an inactive connection cache will be cleaned up.

OneWorld Xe (09/00) 16–77

Security=	14400000	The time in milliseconds before an inactive security cache will be cleaned up. J.D. Edwards recommends using the default setting.
UDCinfo=	1200000	The time in milliseconds before an inactive UDCInfo cache will be cleaned up. J.D. Edwards recommends using the default value.
CacheCheck=	60000	The time in milliseconds to check cache. J.D. Edwards recommends using the default setting.

# [CONNECTION POOL]

Parameter	Recommended Setting	Description
MaxConnection=	50	The maximum number of connection to a data source. Connection request beyond this number will be queued on the next available connection.
MinConnection=	0	The minimum number of connections to a data source. When closing old connections, this number will remain in the pool regardless of use.
PoolGrowth=	5	The number of connections that the system creates when a request for a connection cannot be satisfied with the current allocation.
InitialConnection=	5	The number of connections to create upon pool creation.

#### [JDBC URL]

Parameter	Recommended Setting	Description
DEFAULT=	Jdbc:odbc:Access32   A   JDE   JDE	Defines the JDBC URL override information for F989999 and F989998 (Java Persistent Objects) tables for a particular OneWorld environment. See the syntax descriptions below.
"Environment Name"=	Jdbc:odbc:Access32   A   JDE   JD E	Defines the JDBC URL override information for F989999 and F989998 (Java Persistent Objects) tables for a particular OneWorld environment. See the syntax descriptions below.

The syntax for the values in the [JDBC URL] section is:

<environment name>=<jdbc url>|<jdbc url type>|<owner>|<userid>|<password>

<environment name>=L<jdbc url>|<jdbc url
type>|<owner>|<userid>|<password>

The logic flows in this manner:

- Try to match the given environment name.
- If the environment is found, then return the jdbc url information.
- If the environment is not found, try to match the DEFAULT as environment name.
- If the DEFAULT environment name is found, then return the jdbc url information.
- If the DEFAULT environment information is not found, then use the OCM mappings.

Valid values for <jdbc url> are as follows:

jdbc:odbc:<odbc datasource name>

This value specifies a JDBC-ODBC Bridge.

jdbc:oracle:thin:@ <host>.<port>.<database>

This value specifies an Oracle Thin Drive.

OneWorld Xe (09/00) 16–79

• jdbc:as400://<host><;translate binary=true;refetch=false>

This value specifies an AS/400.

jdbc:ff-microsoft:// <host>.<port>/<database>

This value specifies a Microsoft SQL Server database.

Valid values for <jdbc url type> are:

- O for Oracle
- A for Access
- S for Microsoft SQL Server
- 4 for AS/400

The <owner> value specifies the owner of the database to which the jdbc url will connect. A value for this parameter is required only for types O and S.

Values for <userid> and <password> are the database connection user login ID and password.

**Note:** If you don't provide a jdbc url in this section, OneWorld Java Server will use the database that is configured by OneWorld OCM.

## [JDBC Drivers]

This section specifies the JDBC drivers for different database types. You generally will not need to modify the value provided at installation. No entry is required for either Oracle or DB2/400.

## [SERVER COMPONENTS]

The [SERVER COMPONENTS] section of the jas.ini is used by OneWorld Java Server to set environment variables. Do not modify this section unless you are instructed to do so by J.D. Edwards.

Confirm the following settings within this section:

```
[SERVER COMPONENTS]

com.jdedwards.jas.UserManager

com.jdedwards.jas.JDBCProxy

com.jdedwards.jas.DDEORB

com.jdedwards.jas.DDValidation

com.jdedwards.jas.sql.VTManager

com.jdedwards.jas.security.SecurityBroker

com.jdedwards.jas.UDCJDBC

com.jdedwards.jas.JDEUDCText

com.jdedwards.jas.JDEUpdates

com.jdedwards.jas.JDEQueries

com.jdedwards.jas.JDEOWDirect

com.jdedwards.jas.JDEOWDirect

com.jdedwards.jas.ServerQuery

com.Jdedwards.jas.ServerQuery

com.Jdedwards.jas.JDESignon
```

```
[SERVER COMPONENTS]
```

com.jdedwards.jas.UserManager

com.jdedwards.jas.JDBCProxy

com.jdedwards.jas.JDEORB

com.jdedwards.jas.DDValidaton

com.jdewards.jas.sql.VTManager

com.jdedwards.jas.security.SecruityBroker

com.jdedwards.jas.UDCJDBC

com.jdedwards.jas.JDEUDCtext

com.jdedwards.jas.JDEUpdates

com.jdedwards.jas.JDEQueries

com.jdedwards.jas.JDEOWDirect

com.jdedwards.jas.MenuServer

com.jdedwards.jas.ServerQuery

com.jdedwards.jas.JDESignon

### [JDENET]

Use this section only if you are running business functions and launching UBEs without the JOWProxy service.

Parameter	Recommended Setting	Description
serviceNameConnect=		The TCP port on which the enterprise server is listening. Modify for your environment.
enterpriseServerTimeout=	90000	The time in milliseconds before a timeout condition can occur.
MaxPoolSize=	50	The maximum number of connections to the enterprise server.
TempFileDir=	c:\b7\internet	A temporary directory for jdenet. This entry must be a valid directory on your system.

## [SERVER]

Use this section only if you are running business functions and launching UBEs without the JOWProxy service.

Parameter	Recommended Setting	Description
GlossaryTextServer=	machinename:port	Specifies the enterprise server and the port number on which OneWorld is listening to provide glossary text information for the OneWorld JAS server modify for your environment.
codePage=	1252	The code page for displaying the glossary text information.

# [LOGS]

Use this section only if you are running business functions and launching UBEs without the JOWProxy service.

Parameter	Recommended Setting	Description
Debug	FALSE	No debug logging is performed if value is FALSE. Debug logging is performed if value is TRUE.

Log	c:\b7\internet\jas.log	The name and location of the jas.log file. The directory included in the path must exist on your system.
Debuglog	c:\b7\internet\jasdebug.log	The name and location of the jasdebug.log file. The directory included in the path must exist on your directory.
JdbcTrace	FALSE	No trace logging of JDBC statements is performed if the value is FALSE. Trace logging is performed and JDBC statements are included in the standard output log file if the value is TRUE.

# [DB SYSTEM SETTINGS]

Confirm the following settings in this section. You can copy this section from a valid jde.ini file on a OneWorld client workstation.

Parameter	Recommended Setting	Description
User=	JDE	The default user for accessing the OCM tables. This must be correct in order to start JAS.
Default Pwd=	JDE	The default password for accessing the OCM tables. This must be correct in order to start JAS.
Default Env=	JPRD733	The default environment for accessing the OCM tables. Use a WAN environment.
Base Datasource=	ORACLE PVC	The OneWorld datasource that contains your server map tables.
Object Owner=	PVC	The owners in the database where the server map OCM tables reside.

OneWorld Xe (09/00) 16–83

Database=	hp9000adevl	The database connect string (Oracle) or ODBC datasource name (SQL Server, DB2/400, MS Access) where the server map tables are located.
Load Library=	JDBOCI80.DLL	This setting is not used by the OneWorld Java Server.
Decimal Shift=	Y	The decimal shift specifies whether the system shifts the decimal placement of amount values before storing values to or after reading values from the database.
Julian Dates=	Y	The Julian dates specify whether the system shifts the decimal placement of amount values before storing values to or after reading values from the database.
Use Owner=	Y	Specifies whether the system allows access to the OCM tables only by the object owner.
Secured=	Y	Indicates whether or not the database is secured and requires a user and password login.
Type=		Indicates the database driver used to access the database containing the OCM tables. Valid values are:  O (Oracle) A (Access) S (SQL Server) I/D (AS/400)

Library List=		For AS/400 only, specifies the database library holding the system tables.
Library=	SYSB733	For AS/400 only, specifies the database library holding the system tables. The actual value of the parameter is site dependent and relies on the OCM location. The entry should be created manually if it does not exist.

# [SECURITY]

Confirm the following settings for the [SECURITY] section. These settings are unique to the JAS security server.

Parameter	Recommended Setting	Description
UseLogonCookie=	FALSE	Saves user signon information (username, password, and environment) if value is TRUE. Feature is disabled if value is FALSE.
#CookieLifeTime unit is	"day"	The unit of time used to measure a cookie's lifetime, such as minutes, hours, or days.
CookieLifeTime=	7	The amount of time before a cookie expires, measured by the value of the "#CookieLifeTime unit is" parameter.
NumServers	1	The total number of OneWorld security servers available to web users signing on to the system. If this parameter is missing or has no value, the default value is 1, and the signon is handled by the primary security server.

OneWorld Xe (09/00) 16–85

SecurityServer=	The name of the primary security server
Security ServerN	The name of the secondary security server, where <i>N</i> is 1 for the first secondary server, 2 for the second, and so on. Assign values to this parameter if you want signon to failover to a secondary server if users cannot sign on to the primary server.

## Optional jas.ini Settings for the ActivEra Portal

This section contains optional settings for the ActiveEra Portal. The settings shown in this section are the default settings and are not required to be included as part of the jas.ini. That is, if no value is specified in the jas.ini, the Portal automatically uses the default settings as listed in this section.

However, for sites that wish to modify any values that can be read from the jas.ini, the values must be entered and modified as appropriate for that custom installation. Note, however, that future installations may not preserve the custom modifications, so it is important to save a copy of the jas.ini before doing any upgrade.

Parameter	Recommended Setting	Description
Urlstart	/jde/owportal/	Location of HTML files on web server
Imgurl	/jde/owportal/images/	Location of image files on web server
Styleurl	/jde/owportal/owportal.css	URL of portal style sheet
Achivespec	/jde/owportal/owportal.jar	URL of portal applets JAR file
Hlpimg	help2.gif	Name of help image in component toolbar
Perimg	edit2.gif	Name of personalize image in component toolbar
maximg	maximize2.gif	Name of maximize image in component toolbar
minimg	minimize2.gif	Name of minimize image in component toolbar
resimg	restore2.gif	Name of restore image in component toolbar

rulimg	whiterule.gif	Name of rule image in component toolbar
corplogourl	/jde/owportal/images/jdelogo.gif	URL of corporate logo in navigation area
colorscheme1	Default   #FFFFF   #00009C   #063CE   #080029   #CECECE   #FFFFF   #636363   #FFFFFF   background.jpg   /jde/owportal/owportal.css	Delimited string for color schemes. String consist of name, background color, toolbar color, toolbar color, toolbar color, fixed area color, border color, text color, menu color, greeting color, top background image color, and stylesheet URL.
colorscheme2	Springtime   #FFFFFF   #218C7B   #84BDB5   #006B63   #CECECE   #FFFFFF   #FF6B29   FFFFFF   springtimebkgd.gif /jde/owportal/portal.css	Delimited string for color schemes. String consists of name, background color, toolbar color, toolbar color, toolbar color, fixed area color, border color, text color, menu color, greeting color, top background image color, and stylesheet URL.
colorscheme3	Bluedot   #FFFFFF   #4A5A9C   #849CC6   #001873   CECECE   #FFFFFF   #737BB5   #FFFFFF   bluedotbkgd.gif   /jde/owportal/portal.css	Delimited string for color schemes. String consists of name, background color, toolbar color, toolbar color, toolbar color, fixed area color, border color, text color, menu color, greeting color, top background image color, and stylesheet URL.

### See Also

OneWorld Java Server Installation Guide

## Glossary

**AAI.** See automatic accounting instruction.

action message. With OneWorld, users can receive messages (system-generated or user-generated) that have shortcuts to OneWorld forms, applications, and appropriate data. For example, if the general ledger post sends an action error message to a user, that user can access the journal entry (or entries) in error directly from the message. This is a central feature of the OneWorld workflow strategy. Action messages can originate either from OneWorld or from a third-party e-mail system.

**ActiveX.** A computing technology, based on object linking and embedding, that enables Java applet-style functionality for Web browsers as well as other applications. (Java is limited to Web browsers at this time.) The ActiveX equivalent of a Java applet is an ActiveX control. These controls bring computational, communications, and data manipulation power to programs that can "contain" them. For example, certain Web browsers, Microsoft Office programs, and anything developed with Visual Basic or Visual C++.

**alphanumeric character.** A combination of letters, numbers, and symbols used to represent data. Contrast with numeric character and special character.

**API.** See application programming interface.

**applet.** A small application, such as a utility program or a limited-function spreadsheet. It is generally associated with the programming language Java, and in this context refers to Internet-enabled applications that can be passed from a Web browser residing on a workstation.

**application.** In the computer industry, the same as an executable file. In OneWorld, an interactive or batch application is a DLL that contains programming for a set of related forms that can be run from a menu to perform a business task such as Accounts Payable and Sales Order Processing. Also known as system.

**application developer.** A programmer who develops OneWorld applications using the OneWorld toolset.

**application programming interface (API).** A software function call that can be made from a program to access functionality provided by another program.

**application workspace.** The area on a workstation display in which all related forms within an application appear.

**audit trail.** The detailed, verifiable history of a processed transaction. The history consists of the original documents, transaction entries, and posting of records, and usually concludes with a report.

automatic accounting instruction (AAI). A code that refers to an account in the chart of accounts. AAIs define rules for programs that automatically generate journal entries, including interfaces between Accounts Payable, Accounts Receivable, Financial Reporting, General Accounting systems. Each system that interfaces with the General Accounting system has AAIs. For example, AAIs can direct the General Ledger Post program to post a debit to a specific expense account and a credit to a specific accounts payable account.

**batch header.** The information that identifies and controls a batch of transactions or records.

**batch job.** A task or group of tasks you submit for processing that the system treats as a single unit during processing, for example, printing reports and purging files. The computer system performs a batch job with little or no user interaction.

**batch processing.** A method by which the system selects jobs from the job queue, processes them, and sends output to the outqueue. Contrast with interactive processing.

**batch server.** A server on which OneWorld batch processing requests (also called UBEs) are run instead of on a client, an application server,

or an enterprise server. A batch server typically does not contain a database nor does it run interactive applications.

**batch type.** A code assigned to a batch job that designates to which J.D. Edwards system the associated transactions pertain, thus controlling which records are selected for processing. For example, the Post General Journal program selects for posting only unposted transaction batches with a batch type of O.

batch-of-one immediate. A transaction method that allows a client application to perform work on a client workstation, then submit the work all at once to a server application for further processing. As a batch process is running on the server, the client application can continue performing other tasks. See also direct connect, store and forward.

BDA. See Business View Design Aid.

**binary string (BSTR).** A length prefixed string used by OLE automation data manipulation functions. Binary Strings are wide, double-byte (Unicode) strings on 32-bit Windows platforms.

**Boolean Logic Operand.** In J.D. Edwards reporting programs, the parameter of the Relationship field. The Boolean logic operand instructs the system to compare certain records or parameters. Available options are:

- EQ Equal To.
- LT Less Than.
- LE Less Than or Equal To.
- GT Greater Than.
- GE Greater Than or Equal To.
- NE Not Equal To.
- NL Not Less Than.
- NG Not Greater Than.

**browser.** A client application that translates information sent by the World Wide Web. A client must use a browser to receive, manipulate, and display World Wide Web information on the desktop. Also known as a Web browser.

BSTR. See binary string.

**business function.** An encapsulated set of business rules and logic that can normally be reused by multiple applications. Business functions can execute a transaction or a subset of a transaction (check inventory, issue work orders, and so on). Business functions also contain the APIs that allow them to be called

from a form, a database trigger, or a non-OneWorld application. Business functions can be combined with other business functions, forms, event rules, and other components to make up an application. Business functions can be created through event rules or third-generation languages, such as C. Examples of business functions include Credit Check and Item Availability.

**business function event rule.** Encapsulated, reusable business logic created using through event rules rather than C programming. Contrast with embedded event rule. See also event rule.

**business view.** Used by OneWorld applications to access data from database tables. A business view is a means for selecting specific columns from one or more tables whose data will be used in an application or report. It does not select specific rows and does not contain any physical data. It is strictly a view through which data can be handled.

**Business View Design Aid (BDA).** A OneWorld GUI ool for creating, modifying, copying, and printing business views. The tool uses a graphical user interface.

**category code.** In user defined codes, a temporary title for an undefined category. For example, if you are adding a code that designates different sales regions, you could change category code 4 to Sales Region, and define E (East), W (West), N (North), and S (South) as the valid codes. Sometimes referred to as reporting codes.

central objects. Objects that reside in a central location and consist of two parts: the central objects data source and central C components. The central objects data source contains OneWorld specifications, which are stored in a relational database. Central C components contain business function source, header, object, library, and DLL files and are usually stored in directories on the deployment server. Together they make up central objects.

**check-in location.** The directory structure location for the package and its set of replicated objects. This is usually

\\deploymentserver\release\path\_code\packag e\ packagename. The sub-directories under this path are where the central C components (source, include, object, library, and DLL file) for business functions are stored.

child. See parent/child form.

**client/server.** A relationship between processes running on separate machines. The server process is a provider of software services. The client is a consumer of those services. In essence, client/server provides a clean separation of function based on the idea of service. A server can service many clients at the same time and regulate their access to shared resources. There is a many-to-one relationship between clients and a server, respectively. Clients always initiate the dialog by requesting a service. Servers passively wait for requests from clients.

CNC. See configurable network computing.

**configurable client engine.** Allows user flexibility at the interface level. Users can easily move columns, set tabs for different data views, and size grids according to their needs. The configurable client engine also enables the incorporation of Web browsers in addition to the Windows 95- and Windows NT-based interfaces.

configurable network computing. An application architecture that allows interactive and batch applications, composed of a single code base, to run across a TCP/IP network of multiple server platforms and SQL databases. The applications consist of reusable business functions and associated data that can be configured across the network dynamically. The overall objective for businesses is to provide a future-proof environment that enables them to change organizational structures, business processes, and technologies independently of each other.

**constants.** Parameters or codes that you set and the system uses to standardize information processing by associated programs. Some examples of constants are: validating bills of material online and including fixed labor overhead in costing.

**control.** Any data entry point allowing the user to interact with an application. For example, check boxes, pull-down lists, hyper-buttons, entry fields, and similar features are controls.

**core.** The central and foundation systems of J.D. Edwards software, including General Accounting, Accounts Payable, Accounts Receivable, Address Book, Financial Reporting,

Financial Modeling and Allocations, and Back Office.

**custom gridlines.** A grid row that does not come from the database, for example, totals. To display a total in a grid, sum the values and insert a custom gridline to display the total. Use the system function Insert Grid Row Buffer to accomplish this.

**data dictionary.** The OneWorld method for storing and managing data item definitions and specifications. J.D. Edwards has an active data dictionary, which means it is accessed at runtime.

**data mart.** Department-level decision support databases. They usually draw their data from an enterprise data warehouse that serves as a source of consolidated and reconciled data from around the organization. Data marts can be either relational or multidimensional databases.

data replication. In a replicated environment, multiple copies of data are maintained on multiple machines. There must be a single source that "owns" the data. This ensures that the latest copy of data can be applied to a primary place and then replicated as appropriate. This is in contrast to a simple copying of data, where the copy is not maintained from a central location, but exists independently of the source.

**data source.** A specific instance of a database management system running on a computer. Data source management is accomplished through Object Configuration Manager (OCM) and Object Map (OM).

**data structure.** A group of data items that can be used for passing information between objects, for example, between two forms, between forms and business functions, or between reports and business functions.

data warehouse. A database used for reconciling and consolidating data from multiple databases before it is distributed to data marts for department-level decision support queries and reports. The data warehouse is generally a large relational database residing on a dedicated server between operational databases and the data marts.

**data warehousing.** Essentially, data warehousing involves off-loading operational data sources to target databases that will be used

exclusively for decision support (reports and queries). There are a range of decision support environments, including duplicated database, enhanced analysis databases, and enterprise data warehouses.

**database.** A continuously updated collection of all information a system uses and stores. Databases make it possible to create, store, index, and cross-reference information online.

**database driver.** Software that connects an application to a specific database management system.

**database server.** A server that stores data. A database server does not have OneWorld logic.

**DCE.** See distributed computing environment.

**default.** A code, number, or parameter value that is assumed when none is specified.

**detail.** The specific pieces of information and data that make up a record or transaction. Contrast with summary.

**detail area.** A control that is found in OneWorld applications and functions similarly to a spreadsheet grid for viewing, adding, or updating many rows of data at one time.

**direct connect.** A transaction method in which a client application communicates interactively and directly with a server application. See also batch-of-one immediate, store and forward.

#### distributed computing environment (DCE).

A set of integrated software services that allows software running on multiple computers to perform in a manner that is seamless and transparent to the end-users. DCE provides security, directory, time, remote procedure calls, and files across computers running on a network.

**DLL.** See dynamic link library.

**duplicated database.** A decision support database that contains a straightforward copy of operational data. The advantages involve improved performance for both operational and reporting environments. See also enhanced analysis database, enterprise data warehouse.

**dynamic link library (DLL).** A set of program modules that are designed to be invoked from executable files when the executable files are run, without having to be linked to the

executable files. They typically contain commonly used functions.

**dynamic partitioning.** The ability to dynamically distribute logic or data to multiple tiers in a client/server architecture.

**embedded event rule.** An event rule that is specific to a particular table or application. Examples include form-to-form calls, hiding a field based on a processing option value, and calling a business function. Contrast with business function event rule. See also event rule.

employee work center. This is a central location for sending and receiving all OneWorld messages (system and user generated) regardless of the originating application or user. Each user has a mailbox that contains workflow and other messages, including Active Messages. With respect to workflow, the Message Center is MAPI compliant and supports drag and drop work reassignment, escalation, forward and reply, and workflow monitoring. All messages from the message center can be viewed through OneWorld messages or Microsoft Exchange.

**encapsulation.** The ability to confine access to and manipulation of data within an object to the procedures that contribute to the definition of that object.

enhanced analysis database. A database containing a subset of operational data. The data on the enhanced analysis database performs calculations and provides summary data to speed generation of reports and query response times. This solution is appropriate when external data must be added to source data, or when historical data is necessary for trend analysis or regulatory reporting. See also duplicated database, enterprise data warehouse.

enterprise data warehouse. A complex solution that involves data from many areas of the enterprise. This environment requires a large relational database (the data warehouse) that is a central repository of enterprise data, which is clean, reconciled, and consolidated. From this repository, data marts retrieve data to provide department-level decisions. See also duplicated database, enhanced analysis database.

**enterprise server.** A database server and logic server. See database server. Also referred to as host.

**ERP.** See enterprise resource planning.

**event.** An action that occurs when an interactive or batch application is running. Example events are tabbing out of an edit control, clicking a push button, initializing a form, or performing a page break on a report. The GUI operating system uses miniprograms to manage user activities within a form. Additional logic can be attached to these miniprograms and used to give greater functionality to any event within a OneWorld application or report using event rules.

**event rule.** Used to create complex business logic without the difficult syntax that comes with many programming languages. These logic statements can be attached to applications or database events and are executed when the defined event occurs, such as entering a form, selecting a menu bar option, page breaking on a report, or selecting a record. An event rule can validate data, send a message to a user, call a business function, as well as many other actions. There are two types of event rules:

- Embedded event rules.
- 2 Business function event rules.

**executable file.** A computer program that can be run from the computer's operating system. Equivalent terms are "application" and "program.".

**exit.** 1) To interrupt or leave a computer program by pressing a specific key or a sequence of keys. 2) An option or function key displayed on a form that allows you to access another form.

**facility.** 1) A separate entity within a business for which you want to track costs. For example, a facility might be a warehouse location, job, project, work center, or branch/plant. Sometimes referred to as a business unit. 2) In Home Builder and ECS, a facility is a collection of computer language statements or programs that provide a specialized function throughout a system or throughout all integrated systems. For example, DREAM Writer and FASTR are facilities.

FDA. See Form Design Aid.

**find/browse.** A type of form used to:

- 1 Search, view, and select multiple records in a detail area.
- 2 Delete records.
- 3 Exit to another form.
- 4 Serve as an entry point for most applications.

**firewall.** A set of technologies that allows an enterprise to test, filter, and route all incoming messages. Firewalls are used to keep an enterprise secure.

**fix/inspect.** A type of form used to view, add, or modify existing records. A fix/inspect form has no detail area.

**form.** An element of OneWorld's graphical user interface that contains controls by which a user can interact with an application. Forms allow the user to input, select, and view information. A OneWorld application might contain multiple forms. In Microsoft Windows terminology, a form is known as a dialog box.

**Form Design Aid (FDA).** The OneWorld GUI development tool for building interactive applications and forms.

**form interconnection.** Allows one form to access and pass data to another form. Form interconnections can be attached to any event; however, they are normally used when a button is clicked.

**form type.** The following form types are available in OneWorld:

- 1 Find/browse.
- Fix/inspect.
- 3 Header detail.
- 4 Headerless detail.
- 5 Message.
- 6 Parent/child.
- 7 Search/select.

#### fourth generation language (4GL). A

programming language that focuses on what you need to do and then determines how to do it. Structured Query Language is an example of a 4GL.

graphical user interface (GUI). A computer interface that is graphically based as opposed to being character-based. An example of a character-based interface is that of the AS/400. An example of a GUI is Microsoft Windows. Graphically based interfaces allow pictures and other graphic images to be used in order to give people clues on how to operate the computer.

grid. See detail area.

**GUI.** See graphical user interface.

**header.** Information at the beginning of a table or form. This information is used to identify or

provide control information for the group of records that follows.

**header/detail.** A type of form used to add, modify, or delete records from two different tables. The tables usually have a parent/child relationship.

**headerless detail.** A type of form used to work with multiple records in a detail area. The detail area is capable of of receiving input.

hidden selections. Menu selections you cannot see until you enter HS in a menu's Selection field. Although you cannot see these selections, they are available from any menu. They include such items as Display Submitted Jobs (33), Display User Job Queue (42), and Display User Print Queue (43). The Hidden Selections window displays three categories of selections: user tools, operator tools, and programmer tools.

**host.** In the centralized computer model, a large timesharing computer system that terminals communicate with and rely on for processing. In contrasts with client/server in that those users work at computers that perform much of their own processing and access servers that provide services such as file management, security, and printer management.

HTML. See hypertext markup language.

hypertext markup language. A markup language used to specify the logical structure of a document rather than the physical layout. Specifying logical structure makes any HTML document platform independent. You can view an HTML document on any desktop capable of supporting a browser. HTML can include active links to other HTML documents anywhere on the Internet or on intranet sites.

**index.** Represents both an ordering of values and a uniqueness of values that provide efficient access to data in rows of a table. An index is made up of one or more columns in the table.

**inheritance.** The ability of a class to recieve all or parts of the data and procedure definitions from a parent class. Inheritance enhances developement through the reuse of classes and their related code.

install system code. See system code.

**integrated toolset.** Unique to OneWorld is an industrial-strength toolset embedded in the

already comprehensive business applications. This toolset is the same toolset used by J.D. Edwards to build OneWorld interactive and batch applications. Much more than a development environment, however, the OneWorld integrated toolset handles reporting and other batch processes, change management, and basic data warehousing facilities.

**interactive processing.** Processing actions that occur in response to commands you enter directly into the system. During interactive processing, you are in direct communication with the system, and it might prompt you for additional information while processing your request. See also online. Contrast with batch processing.

**interface.** A link between two or more computer systems that allows these systems to send information to and receive information from one another.

**Internet.** The worldwide constellation of servers, applications, and information available to a desktop client through a phone line or other type of remote access.

**interoperability.** The ability of different computer systems, networks, operating systems, and applications to work together and share information.

**intranet.** A small version of the Internet usually confined to one company or organization. An intranet uses the functionality of the Internet and places it at the disposal of a single enterprise.

**IP.** A connection-less communication protocol that by itself provides a datagram service. Datagrams are self-contained packets of information that are forwarded by routers based on their address and the routing table information contained in the routers. Every node on a TCP/IP network requires an address that identifies both a network and a local host or node on the network. In most cases the network administrator sets up these addresses when installing new workstations. In some cases, however, it is possible for a workstation, when booting up, to query a server for a dynamically assigned address.

**IServer Service.** Developed by J.D. Edwards, this internet server service resides on the web server, and is used to speed up delivery of the Java class files from the database to the client.

**ISO 9000.** A series of standards established by the International Organization for Standardization, designed as a measure of product and service quality.

**J.D. Edwards Database.** See JDEBASE Database Middleware.

**Java.** An Internet executable language that, like C, is designed to be highly portable across platforms. This programming language was developed by Sun Microsystems. Applets, or Java applications, can be accessed from a web browser and executed at the client, provided that the operating system or browser is Java-enabled. (Java is often described as a scaled-down C++). Java applications are platform independent.

**Java Database Connectivity (JDBC).** The standard way to access Java databases, set by Sun Microsystems. This standard allows you to use any JDBC driver database.

**jde.ini.** J.D. Edwards file (or member for AS/400) that provides the runtime settings required for OneWorld initialization. Specific versions of the file/member must reside on every machine running OneWorld. This includes workstations and servers.

**JDEBASE Database Middleware.** J.D. Edwards proprietary database middleware package that provides two primary benefits:

- 1. Platform-independent APIs for multidatabase access. These APIs are used in two ways:
- a. By the interactive and batch engines to dynamically generate platform-specific SQL, depending on the datasource request.
- b. As open APIs for advanced C business function writing. These APIs are then used by the engines to dynamically generate platform-specific SQL.
- 2. Client-to-server and server-to-server database access. To accomplish this OneWorld is integrated with a variety of third-party database drivers, such as Client Access 400 and open database connectivity (ODBC).

**JDECallObject.** An application programming interface used by business functions to invoke other business functions.

**JDENET.** J.D. Edwards proprietary middleware software. JDENET is a messaging software package.

#### **JDENET communications middleware.** J.D.

Edwards proprietary communications middleware package for OneWorld. It is a peer-to-peer, message-based, socket based, multiprocess communications middleware solution. It handles client-to-server and server-to-server communications for all OneWorld supported platforms.

**job queue.** A group of jobs waiting to be batch processed. See also batch processing.

**just in time installation (JITI).** OneWorld's method of dynamically replicating objects from the central object location to a workstation.

**just in time replication (JITR).** OneWorld's method of replicating data to individual workstations. OneWorld replicates new records (inserts) only at the time the user needs the data. Changes, deletes, and updates must be replicated using Pull Replication.

**KEY.** A column or combination of columns that identify one or more records in a database table.

**leading zeros.** A series of zeros that certain facilities in J.D. Edwards systems place in front of a value you enter. This normally occurs when you enter a value that is smaller than the specified length of the field. For example, if you enter 4567 in a field that accommodates eight numbers, the facility places four zeros in front of the four numbers you enter. The result appears as: 00004567.

**level of detail.** 1) The degree of difficulty of a menu in J.D. Edwards software. The levels of detail for menus are as follows:

- A Major Product Directories.
- B Product Groups.
- 1 Basic Operations.
- 2 Intermediate Operations.
- 3 Advanced Operations.
- 4 Computer Operations.
- 5 Programmers.
- 6 Advanced Programmers Also known as menu levels.
- 2) The degree to which account information in the General Accounting system is summarized. The highest level of detail is 1 (least detailed) and the lowest level of detail is 9 (most detailed).

**MAPI.** See Messaging Application Programming Interface.

master table. A database table used to store data and information that is permanent and necessary to the system's operation. Master tables might contain data such as paid tax amounts, supplier names, addresses, employee information, and job information.

**menu.** A menu that displays numbered selections. Each of these selections represents a program or another menu. To access a selection from a menu, type the selection number and then press Enter.

menu levels. See level of detail.

**menu masking.** A security feature of J.D. Edwards systems that lets you prevent individual users from accessing specified menus or menu selections. The system does not display the menus or menu selections to unauthorized users.

Messaging Application Programming Interface (MAPI). An architecture that defines the components of a messaging system and how they behave. It also defines the interface between the messaging system and the components.

**middleware.** A general term that covers all the distributed software needed to support interactions between clients and servers. Think of it as the software that's in the middle of the client/server system or the "glue" that lets the client obtain a service from a server.

**modal.** A restrictive or limiting interaction created by a given condition of operation. Modal often describes a secondary window that restricts a user's interaction with other windows. A secondary window can be modal with respect to it's primary window or to the entire system. A modal dialog box must be closed by the user before the application continues.

**modeless.** Not restricting or limiting interaction. Modeless often describes a secondary window that does not restrict a user's interaction with other windows. A modeless dialog box stays on the screen and is available for use at any time but also permits other user activities.

**multitier architecture.** A client/server architecture that allows multiple levels of processing. A tier defines the number of

computers that can be used to complete some defined task.

**network computer.** As opposed to the personal computer, the network computer offers (in theory) lower cost of purchase and ownership and less complexity. Basically, it is a scaled-down PC (very little memory or disk space) that can be used to access network-based applications (Java applets, ActiveX controls) via a network browser.

**network computing.** Often referred to as the next phase of computing after client/server. While its exact definition remains obscure, it generally encompasses issues such as transparent access to computing resources, browser-style front-ends, platform independence, and other similar concepts.

**next numbers.** A feature you use to control the automatic numbering of such items as new G/L accounts, vouchers, and addresses. It lets you specify a numbering system and provides a method to increment numbers to reduce transposition and typing errors.

**numeric character.** Digits 0 through 9 that are used to represent data. Contrast with alphanumeric characters.

**object.** A self-sufficient entity that contains data as well as the structures and functions used to manipulate the data. For OneWorld purposes, an object is a reusable entity that is based on software specifications created by the OneWorld toolset. See also object librarian.

#### object configuration manager (OCM).

OneWorld's Object Request Broker and the control center for the runtime environment. It keeps track of the runtime locations for business functions, data, and batch applications. When one of these objects is called, the Object Configuration Manager directs access to it using defaults and overrides for a given environment and user.

**object embedding.** When an object is embedded in another document, an association is maintained between the object and the application that created it; however, any changes made to the object are also only kept in the compound document. See also object linking.

**object librarian.** A repository of all versions, applications, and business functions reusable in building applications. It provides check-out and

check-in capabilities for developers, and it controls the creation, modification, and use of OneWorld Objects. The Object Librarian supports multiple environments (such as production and development) and allows objects to be easily moved from one environment to another.

**object linking.** When an object is linked to another document, a reference is created with the file the object is stored in, as well as with the application that created it. When the object is modified, either from the compound document or directly through the file it is saved in, the change is reflected in that application as well as anywhere it has been linked. See also object embedding.

**object linking and embedding (OLE).** A way to integrate objects from diverse applications, such as graphics, charts, spreadsheets, text, or an audio clip from a sound program. See also object embedding, object linking.

**object-based technology (OBT).** A technology that supports some of the main principles of object-oriented technology: classes, polymorphism, inheritance, or encapsulation.

**object-oriented technology (OOT).** Brings software development past procedural programming into a world of reusable programming that simplifies development of applications. Object orientation is based on the following principles: classes, polymorphism, inheritance, and encapsulation.

**OCM.** See object configuration manager.

**ODBC.** See open database connectivity.

**OLE.** See object linking and embedding.

OneWorld. A combined suite of comprehensive, mission-critical business applications and an embedded toolset for configuring those applications to unique business and technology requirements. OneWorld is built on the Configurable Network Computing technology- J.D. Edwards' own application architecture, which extends client/server functionality to new levels of configurability, adaptability, and stability.

**OneWorld application.** Interactive or batch processes that execute the business functionality of OneWorld. They consist of reusable business functions and associated data that are platform

independent and can be dynamically configured across a TCP/IP network.

**OneWorld object.** A reusable piece of code that is used to build applications. Object types include tables, forms, business functions, data dictionary items, batch processes, business views, event rules, versions, data structures, and media objects. See also object.

**OneWorld process.** Allows OneWorld clients and servers to handle processing requests and execute transactions. A client runs one process, and servers can have multiple instances. OneWorld processes can also be dedicated to specific tasks (for example, workflow messages and data replication) to ensure that critical processes don't have to wait if the server is particularly busy.

# **OneWorld Web development computer.** A standard OneWorld Windows developer computer with the additional components installed:

- JFC (0.5.1).
- Generator Package with Generator.Java and JDECOM.dll.
- R2 with interpretive and application controls/form.

**online.** Computer functions over which the system has continuous control. Users are online with the system when working with J.D. Edwards system provided forms.

**open database connectivity (ODBC).** Defines a standard interface for different technologies to process data between applications and different data sources. The ODBC interface is made up of a set of function calls, methods of connectivity, and representation of data types that define access to data sources.

**open systems interconnection (OSI).** The OSI model was developed by the International Standards Organization (ISO) in the early 1980s. It defines protocols and standards for the interconnection of computers and network equipment.

operand. See Boolean Logic Operand.

**output.** Information that the computer transfers from internal storage to an external device, such as a printer or a computer form.

output queue. See print queue.

**package.** OneWorld objects are installed to workstations in packages from the deployment server. A package can be compared to a bill of material or kit that indicates the necessary objects for that workstation and where on the deployment server the install program can find them. It is a point-in-time "snap shot" of the central objects on the deployment server.

**package location.** The directory structure location for the package and it's set of replicated objects. This is usually \\deployment server\release\path\_code\package\ package name. The sub-directories under this path are where the replicated objects for the package will be placed. This is also referred to as where the package is built or stored.

**parameter.** A number, code, or character string you specify in association with a command or program. The computer uses parameters as additional input or to control the actions of the command or program.

parent/child form. A type of form that presents parent/child relationships in an application on one form. The left portion of the form presents a tree view that displays a visual representation of a parent/child relationship. The right portion of the form displays a detail area in browse mode. The detail area displays the records for the child item in the tree. The parent/child form supports drag and drop functionality.

**partitioning.** A technique for distributing data to local and remote sites to place data closer to the users who access. Portions of data can be copied to different database management systems.

**path code.** A pointer to a specific set of objects. A path code is used to locate:

- 1. Central Objects.
- 2. Replicated Objects.

**platform independence.** A benefit of open systems and Configurable Network Computing. Applications that are composed of a single code base can be run across a TCP/IP network consisting of various server platforms and SQL databases.

**polymorphism.** A principle of object-oriented technology in which a single mnemonic name can be used to perform similar operations on software objects of different types.

**portability.** Allows the same application to run on different operating systems and hardware platforms.

**primary key.** A column or combination of columns that uniquely identifies each row in a table.

**print queue.** A list of tables, such as reports, that you have submitted to be written to an output device, such as a printer. The computer spools the tables until it writes them. After the computer writes the table, the system removes the table identifier from the list.

**processing option.** A feature of the J.D. Edwards reporting system that allows you to supply parameters to direct the functions of a program. For example, processing options allow you to specify defaults for certain form displays, control the format in which information prints on reports, change how a form displays information, and enter beginning dates.

**program temporary fix (PTF).** A representation of changes to J.D. Edwards software that your organization receives on magnetic tapes or diskettes.

**published table.** Also called a "Master" table, this is the central copy to be replicated to other machines. Resides on the "Publisher" machine. the Data Replication Publisher Table (F98DRPUB) identifies all of the Published Tables and their associated Publishers in the enterprise.

**publisher.** The server that is responsible for the Published Table. The Data Replication Publisher Table (F98DRPUB) identifies all of the Published Tables and their associated Publishers in the enterprise.

**pull replication.** One of the OneWorld methods for replicating data to individual workstations. Such machines are set up as Pull Subscribers using OneWorld's data replication tools. The only time Pull Subscribers are notified of changes, updates, and deletions is when they request such information. The request is in the form of a message that is sent, usually at startup, from the Pull Subscriber to the server machine that stores the Data Replication Pending Change Notification table (F98DRPCN).

**purge.** The process of removing records or data from a system table.

**query by example (QBE).** Located at the top of a detail area, it is used to search for data to be displayed in the detail area.

**redundancy.** Storing exact copies of data in multiple databases.

**regenerable.** Source code for OneWorld business functions can be regenerated from specifications (business function names). Regeneration occurs whenever an application is recompiled, eitherfor a new platform or when new functionality is added.

**relationship.** Links tables together and facilitates joining business views for use in an application or report. Relationships are created based on indexes.

**release/release update.** A "release" contains major new functionality, and a "release update" contains an accumulation of fixes and performance enhancements, but no new functionality.

**replicated object.** A copy or replicated set of the central objects must reside on each client and server that run OneWorld. The path code indicates the directory the directory where these objects are located.

**run.** To cause the computer system to perform a routine, process a batch of transactions, or carry out computer program instructions.

SAR. See software action request.

**scalability.** Allows software, architecture, network, or hardware growth that will support software as it grows in size or resource requirements. The ability to reach higher levels of performance by adding microprocessors.

**search/select.** A type of form used to search for a value and return it to the calling field.

**selection.** Found on J.D. Edwards menus, selections represent functions that you can access from a menu. To make a selection, type the associated number in the Selection field and press Enter.

**server.** Provides the essential functions for furnishings services to network users (or clients) and provides management functions for network administrators. Some of these functions are storage of user programs and data and management functions for the file systems. It may not be possible for one server to support all

users with the required services. Some examples of dedicated servers that handle specific tasks are backup and archive servers, application and database servers.

**servlet.** Servlets provide a Java-based solution used to address the problems currently associated with doing server-side programming, including inextensible scripting solutions. Servlets are objects that conform to a specific interface that can be plugged into a Java-based server. Servlets are to the server-side what applets are to the client-side.

**software.** The operating system and application programs that tell the computer how and what tasks to perform.

**software action request (SAR).** An entry in the AS/400 database used for requesting modifications to J.D. Edwards software.

**special character.** A symbol used to represent data. Some examples are \*, &, #, and /. Contrast with alphanumeric character and numeric character.

**specifications.** A complete description of a OneWorld object. Each object has its own specification, or name, which is used to build applications.

**spool.** The function by which the system stores generated output to await printing and processing.

**spooled table.** A holding file for output data waiting to be printed or input data waiting to be processed.

**SQL.** See structured query language.

**static text.** Short, descriptive text that appears next to a control variable or field. When the variable or field is enabled, the static text is black; when the variable or field is disabled, the static text is gray.

**store and forward.** A transaction method that allows a client application to perform work and, at a later time, complete that work by connecting to a server application. This often involves uploading data residing on a client to a server.

**structured query language (SQL).** A fourth generation language used as an industry standard for relational database access. It can be used to create databases and to retrieve, add,

modify, or deleta data from databases. SQL is not a complete programming language because it does not contain control flow logic.

**subfile.** See detail.

submit. See run.

**subscriber.** The server that is responsible for the replicated copy of a Published Table. Such servers are identified in the Subscriber Table.

**subscriber table.** The Subscriber Table (F98DRSUB), which is stored on the Publisher Server with the Data Replication Publisher Table (F98DRPUB) identifies all of the Subscriber machines for each Published Table.

**summary.** The presentation of data or information in a cumulative or totaled manner in which most of the details have been removed. Many of the J.D. Edwards systems offer forms and reports that are summaries of the information stored in certain tables. Contrast with detail.

**system.** See application.

**System Code.** System codes are a numerical representation of J.D. Edwards and customer systems. For example, 01 is the system code for Address Book. System codes 55 through 59 are reserved for customer development by customers. Use system codes to categorize within OneWorld. For example, when establishing user defined codes (UDCs), you must include the system code the best categorizes it. When naming objects such as applications, tables, and menus, the second and third characters in the object's name is the system code for that object. For example, G04 is the main menu for Acounts Payable, and 04 is its system code.

**system function.** A program module, provided by OneWorld, available to applications and reports for further processing.

**table.** A two-dimensional entity made up of rows and columns. All physical data in a database are stored in tables. A row in a table contains a record of related information. An example would be a record in an Employee table containing the Name, Address, Phone Number, Age, and Salary of an employee. Name is an example of a column in the employee table.

**table design aid (TDA).** A OneWorld GUI tool for creating, modifying, copying, and printing database tables.

table event rules. Use table event rules to attach database triggers (or programs) that automatically run whenever an action occurs against the table. An action against a table is referred to as an event. When you create a OneWorld database trigger, you must first determine which event will activate the trigger. Then, use Event Rules Design to create the trigger. Although OneWorld allows event rules to be attached to application events, this functionality is application specific. Table event rules provide embedded logic at the table level.

**TCP/IP.** Transmission Control Protocol/Internet Protocol. The original TCP protocol was developed as a way to interconnect networks using many different types of transmission methods. TCP provides a way to establish a connection between end systems for the reliable delivery of messages and data.

**TCP/IP services port.** Used by a particular server application to provide whatever service the server is designed to provide. The port number must be readily known so that an application programmer can request it by name.

TDA. See table design aid.

**Terminal Identification.** The workstation ID number. Terminal number of a specific terminal or IBM user ID of a particular person for whom this is a valid profile. Header Field: Use the Skip to Terminal/User ID field in the upper portion of the form as an inquiry field in which you can enter the number of a terminal or the IBM user ID of a specific person whose profile you want the system to display at the top of the list. When you first access this form, the system automatically enters the user ID of the person signed on to the system. Detail Field: The Terminal/User ID field in the lower portion of the form contains the user ID of the person whose profile appears on the same line. A code identifying the user or terminal for which you accessed this window.

**third generation language (3GL).** A programming language that requires detailed information about how to complete a task. Examples of 3GLs are COBOL, C, Pascal and FORTRAN.

**trigger.** Allow you to attach default processing to a data item in the data dictionary. When that data item is used on an application or report, the trigger is invoked by an event associated with the data item. OneWorld also has three visual assist triggers: calculator, calendar and search form.

**UDC Edit Control.** Use a User-Defined Code (UDC) Edit Control for a field that accepts only specific values defined in a UDC table. Associate a UDC edit control with a database item or dictionary item. The visual assist Flashlight automatically appears adjacent to the UDC edit control field. When you click on the visual assist Flashlight, the attached search and select form displays valid values for the field. To create a UDC Edit Control, you must:

- Associate the data item with a specific UDC table in the Data Dictionary.
- Create a search and select form for displaying valid values from the UDC table.

**uniform resource locator (URL).** Names the address of a document on the Internet or an intranet. The following is an example of URL:http://www.jdedwards.com. This is J.D. Edwards Internet address.

**user defined code (type).** The identifier for a table of codes with a meaning you define for the system, such as ST for the Search Type codes table in Address Book. J.D. Edwards systems provide a number of these tables and allow you to create and define tables of your own. User defined codes were formerly known as descriptive titles.

**user defined codes (UDC).** Codes within software that users can define, relate to code descriptions, and assign valid values. Sometimes user defined codes are referred to as a generic code table. Examples of such codes are unit-of-measure codes, state names, and employee type codes.

**valid codes.** The allowed codes, amounts, or types of data that you can enter in a field. The system verifies the information you enter against the list of valid codes.

**visual assist.** Forms that can be invoked from a control to assist the user in determining what data belongs in the control.

**vocabulary overrides.** A feature you can use to override field, row, or column title text on forms and reports.

**wchar\_t.** Internal type of a wide character. Used for writing portable programs for international markets.

**web client.** Any workstation that contains an internet browser. The web client communicates with the web server for OneWorld data.

web server. Any workstation that contains the IServer service, SQL server, Java menus and applications, and Internet middleware. The web server receives data from the web client, and passes the request to the enterprise server. When the enterprise server processes the information, it sends it back to the web server, and the web server sends it back to the web client.

window. See form.

workflow. According to the Workflow Management Coalition, worlflow means "the automation of a business process, in whole or part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules.".

workgroup server. A remote database server usually containing subsets of data replicated from a master database server. This server does not performance an application or batch processing. It may or may not have OneWorld running (in order to replicate data).

worldwide web. A part of the Internet that can transmit text, graphics, audio, and video. The World Wide Web allows clients to launch local or remote applications.

**z file.** For store and forward (network disconnected) user, OneWorld store and forward applications perform edits on static data and other critical information that must be valid to process an order. After the initial edits are complete, OneWorld stores the transactions in work tables on the workstation. These work table are called Z files. When a network connection is established, Z files are uploaded to the enterprise server and the transactions are edited again by a master business function. The master business function will then update the records in your transaction files.



# Index

A	Adding values to a report interconnect, 12–24
	Administration, data dictionary, 4–1
Accessing security tables, 10–42	Administrator, hardware, network, and
Accessing vocabulary overrides, 11–3	third-party software, 1–4
Action security, 10–5	Administrators, CNC, 1–3
adding security, 10-18	Allowed (user) actions
changing security, 10–19	configuring, 5–17
removing security, 10-19	overview, 5–5
setting up security, 10–16	setting up, 5–23
ActivEra Portal, optional jas.ini settings,	Application
16–86	consultant, 1–3
ActivEra Portal configuration, 10–83	developers, 1–3
configuring security, 10-83	project leaders, 1–3
configuring toolbars, 10–84	Application layer, JDENet communication
setting component permissions, 10-92	middleware, 2–3
setting workspace permissions, 10-91	Application security, 10–5
Activity rules	adding security to an application, 10–12
object transfer, 5–38	changing security, 10–12
overview, 5–12	removing from an application, 10–13
project status, 5–35	setting up for an exclusive application,
Add	10-34
individual user, 9–5	setting up security, 10–10
multiple users, 9–6	Applications, adding to a menu, 8–12
notification subscription, 5–50	AS/400, jde.ini server settings, 16–19
object save location, 5–45	Assigning a user role, 9–23
user role, 5–18	Assigning business preferences to user and
Adding a media object queue, 13–11	group profiles, 9–16
Adding a menu selection, 8–9	Assigning environments to user and group
Adding a new daylight savings rule, 12–43	profiles, 9–14
Adding a new printer, 6–7	
Adding a publisher, 3–28	
Adding a report selection to a menu, 8–15	В
Adding action security, 10–18	
Adding an application to a menu, 8–13	Barcode font
Adding and revising data sources for user	
security, 10–66	copying barcode printer information for
Adding or changing web addresses on	a new printer, 6–32
OneWorld Explorer Help, 8–19	deleting barcode support information for
Adding security to a tab, 10–30	a printer, 6–33
Adding security to an application, 10–12	modifying OneWorld printer information,
Adding security to an exit, 10–33	6–32
Adding security to processing options,	setting up for OneWorld, 6–31
10-27	Batch applications, overriding specifications with Scheduler, 12–22
Adding subscribers, 3–31	with scheduler, 12-22

Batch jobs, scheduling a recurring job, 12-6	data replication
Batch processes	published table and publisher
creating profiles, 9–18	machine, 3–5
creating publishers and subscribers, 3-39	replicated table and subscriber
Batch vocabulary overrides, creating a	machine, 3–5
batch vocabulary override, 11-10	Configuration
	options, 5–9
	settings indicators, 5–16
C	workflow, 5–10
	Configuring ActivEra Portal security, 10-83
Cache, caching data replication	Configuring ActivEra Portal toolbars, 10-84
information, 3–8	Configuring ActivEra Portal workspace
Cached security information,	permissions, 10–91
understanding, 10–4	Configuring Solution Explorer security,
Chain replication, definition, 3–25	10–97
Change, signon passwords (administrators	Consultant
only), 10–62	application, 1–3
Changing a menu selection, 8–9	CNC, 1–3
Changing a friend selection, 6–7 Changing action security, 10–19	custom solution, 1–3
Changing addresses on OneWorld Explorer	hardware, network, and third-party
Help, 8–19	software, 1–4
Changing exit security, 10–33	Control records, using with the Scheduler
Changing menu selection text, 8–28	server, 12–33
Changing menu text for languages, 8–26	Conventions, naming conventions, 15-1
Changing security for a tab, 10–31	Copying, publisher and associated
Changing security for an application, 10–12	subscribers, 3–41
Changing security for processing options,	Copying a menu selection, 8–25
10–28	Copying a single security record for a user
Changing the enterprise server jde.ini file	or group, 10–39
for security, 10–70	Copying an existing printer, 6–23
Changing the jde.ini file for user security,	Copying data dictionary files to a server
10-68	using TAMFTP.exe, 3–72
Changing the job launch status, 12-29	Copying OneWorld barcode printer
Changing the workstation jde.ini file for	information for a new printer, 6–32
security, 10–68	Copying security for a user or group, 10–38
Checking report status, 7–4	Copying user and group profiles, 9–13
CNC	Copying user security, 10–59
administrator, 1–3	Create, object save location, 5–45
consultant, 1–3	Creating a batch vocabulary override, 11–10
Coexistence, security, 10–7	Creating a user role, 9–22
Column security, 10–5	Creating an interactive vocabulary override,
setting up security, 10-23	11–7
Column Security Revisions form, deleting	Creating Fast Path selections, 8–22 Creating logs for your report, 6–28
security, 10–25	
Communication middleware, JDENet, 2–3	Creating profiles using a batch process, 9–18
Concepts	
allowed (user) actions, 5-5	Creating publishers and subscribers using a batch process, 3–39
	Creating user security, 10–53, 10–55
	Creating user security, 10–33, 10–33 Creating vocabulary overrides, 11–7
	Greating (Generally Greiffield, 11 /

Custom solution consultant, 1–3	Data replication
	adding a publisher, 3–28
_	adding subscribers, 3–31
D	benefits, 3–3
	caching information, 3–8
Data viewing in Universal Table Province	chain replication, 3–25
Data, viewing in Universal Table Browser,	concepts
14–3 Data dictionaries	published table and publisher
	machine, 3–5
synchronizing coexistence data	replicated table and subscriber
dictionaries, 4–11	machine, 3–5
synchronizing for WorldSoftware and	copying publishers with associated
OneWorld, 4–11	subscribers, 3–41
Data dictionary	definition, 3–1
administration, 4–1	deleting a publisher, 3–30
copying files to a server using	deleting individual subscribers, 3–36
TAMFTP.exe, 3–72	deleting subscribers, 3–36
overview about replicating changes, 3–65	enable/disable flag, definition, 3-7
recreating replicated files, 3–72	enabling and disabling all publishers and
refreshing the data dictionary, 4–9	subscribers, 3–37
replicating all changes, 4–9	enabling and disabling selected
replicating changes to servers, 4–7	subscribers, 3–39
replicating changes to workstations, 4–4	enabling and disabling subscribers for
replicating only changed items, 4–8	one publisher, 3–38
setting up replication, 3–70	forced synchronization, definition, 3–7
setting up replication on the workstation,	in-synch flag, 3-6
4–5	just-in-time replication, 3–16
transferring files, 3–73	modifying the server jde.ini file, 3-58
troubleshooting, 4–10	planning replication strategy, 3-8
types of replication	pull replication, 3–14
default just-in-time-replication for additions only, 3–66	push replication, 3–19
just-in-time replication for change and	replicating data dictionary changes to
delete, 3–66	servers, 4–7
process flow for workgroup server	replicating data dictionary changes to
configuration, 3–67	workstations, 4–4
replicating tables on a workgroup	replicating only changed data dictionary
server, 3–67	items, 4–8
replicating TAM specifications on logic	selective replication, 3–26
servers, 3–69	setting up, 3–27
understanding replication, 4–3	setting up data dictionary replication on
updating display decimals, 4–13	the workstation, 4–5
Data Dictionary – Error Messages (F9207),	setting up environments, 3–42
4–3	setting up for non-OneWorld workgroup
Data Dictionary – Smart Fields (F9212), 4–3	server, 3–50
Data Field Display Text (F9202), 4–3	setting up for the data dictionary, 3-70
Data Field Specifications (F9210), 4–3	setting up forced synchronization, 3-57
Data Item Alpha Descriptions (F9203), 4–3	setting up forced synchronization on a
Data Item Master (F9200), 4–3	workstation, 3–59

synchronizing and unsynchronizing	Denning when Scheduler resubmits a job,
selected subscribers, 3–36	12–20
synchronizing and unsynchronizing	Deleting
subscribers, 3–34	deleting individual subscribers, 3–36
synchronizing and unsynchronizing	notification subscription, 5–55
subscribers for one publisher, 3–35	object save location, 5–48
tables suitable for replicating, 3–9	user role, 5–22
tables unsuitable for replicating, 3–13	Deleting a media object queue, 13-13
understanding, 3–3	Deleting a paper type, 6-25
understanding data dictionary replication,	Deleting a printer, 6-24
4–3	Deleting a publisher, 3-30
viewing outstanding changes for a given	Deleting a user role, 9-24
host, 3–60	Deleting access on the Exclusive
viewing publisher changes not received	Application Security form, 10–35
by the Pending Change Log, 3-62	Deleting all subscribers, 3-36
viewing pull subscribers who have not	Deleting barcode support information for a
retrieved their changes, 3-63	printer, 6–33
Data Replication Change Log (F98DRLOG),	Deleting security on the Column Security
3-6, 3-63, 4-7	Revisions form, 10–25
Data Replication Pending Change	Deleting security on the Row Security
Notifications (F98DRPCN), 3–6, 3–63, 4–7	Revisions form, 10–23
Data Replication Publisher (F98DRPUB),	Deleting security on the Work with
3–5	User/Group form, 10–40
Data Replication Subscribers (F98DRSUB),	Deleting user security, 10–61
3–5	Designing reports to run on OneWorld line
Data sources	printers, 6–35
adding and revising for user security,	Detail, controlling logging, 5–31
10–66	Determining logical printers attached to
naming conventions, 15–1	batch processes, 6–26
revising for user security, 10–67	Developers, application, 1–3
Daylight savings rules	Development, controlling in event of
adding a new rule, 12–43	logging failure, 5–33
modifying an existing rule, 12–45	Disabling Object Action Notification, 5–49
modifying rules, 12–43	Disabling SAR integration, 5–29
Dedicated processes, OneWorld, 2–6	Dispatch functions, using with the
Default projects	Scheduler server, 12–34
managing non-Object Librarian objects,	Display decimals, updating display
5–5	decimals, 4–13
moving objects, 5–4	decimals, 1 1)
object research and development, 5–4	
overview, 5–3	E
Default security settings for Solution	_
Explorer, 10–97	
Defining a default printer, 6–20	Enable / Disable, forms, 3–38
Defining a new menu, 8–3	Enable / Disable Publishers & Subscribers,
Defining the location of a media object	forms, 3–38
queue, 13–13	Enable/disable flag, definition, 3-7
Defining the menu selection, 8–12	Enabling and disabling all publishers and
Demning the ment selection, 0-12	subscribers, 3–37

Enabling and disabling selected subscribers, 3–39	Enable / Disable Publishers & Subscribers, 3–38
Enabling and disabling subscribers of one	Environment Selection form, resetting the
publisher, 3–38	form, 10–80
Enabling media objects, 13–18	Exclusive Application Security form,
Enabling Object Action Notification, 5–49	10–35
Enabling OneWorld subsystems, 7–16	Menu Header Revisions, 8–4
Enabling OneWorld to use media objects,	Publisher Revisions, 3–29
13-3	Row Security Revisions form, 10–23
Ending OneWorld subsystems, 7–21	Subscriber Revisions, 3–32
Enterprise servers	Synchronize All, 3–34
AS/400 server jde.ini settings, 16–19	Synchronize Subscribers, 3–35
changing the jde.ini file for security,	Work With Batch Versions, 4–14
10–70	Work With Publishers, 3–29
server jde.ini settings for WebSphere,	Work with Servers
16–69	changing the priority and printer for
UNIX jde.ini file settings, 16–35	jobs, 7–5
Windows NT jde.ini settings, 16–51	checking the status of reports, 7–4
Environment Selection form, resetting the	printing jobs, 7–7
form, 10–80	Work With Subscribers, 3–31
Environments	Work with User/Group form, 10–40
assigning to group and user profiles, 9–14	
overriding the environment, 12-17	G
setting up for data replication, 3-42	
Exit security	Group profiles
adding security, 10-33	assigning business preferences, 9–16
changing security, 10-33	assigning environments to group profiles,
removing exit security, 10-34	9–14
setting up security, 10-31	copying group profiles, 9–13
External calls, setting up security, 10-36	creating group profiles, 9–10
	creating using a batch process, 9–18
_	modifying group profiles, 9–10
F	Groups
	copying a single security record, 10–39
Fast Path	copying security, 10–38
creating selections, 8–22	removing data sources for security, 10–68
securing for user and group profiles,	security, 10–3
9–10	occurry, 10 5
Filtering, menus, 8–1	
Forced synchronization	Н
definition, 3–7	•
modifying workstation jde.ini files, 3–58	
setting up, 3–57	Hardware
setting up a workstation, 3–59	administrators, 1–4
Forms	consultants, 1–4
Column Security Revisions, 10–25	History, reviewing security history, 10–64
Enable / Disable, 3–38	Holding jobs, 7–10
Zitable / Zibable, 5 50	Host, viewing outstanding changes for a
	given host, 3–60

I	jde.ini file
	[AS400], AS/400 server jde.ini settings,
Identify years and objects for consuity 10.7	16–19
Identify users and objects for security, 10–7	[BSFN BUILD]
Image media objects, definition, 13–9	AS/400 server jde.ini settings, 16–20
Imaging	UNIX server jde.ini settings, 16-35
files, defined, 13–1	Windows NT server jde.ini settings,
overview, 13–1	16–51
process flow, 13–17	[BSFN Builder], Windows NT server
setting up, 13–15	jde.ini settings, 16–52
typical process flow, 13–16	[CLUSTER], UNIX server jde.ini settings,
Imaging Constants (F98101), 13–10, 13–16	16–38
Implementing user roles, 9–22	[DB SYSTEM SETTINGS – SECONDARY],
Individual user, add, 9–5	workstation jde.ini settings, 16-5
INI file, locating on the AS/400, 16–2	[DB SYSTEM SETTINGS]
In-Synch flag, defined, 3–6	AS/400 server jde.ini settings, 16-21
Integration, disabling SAR system, 5–29	UNIX server jde.ini settings, 16-38
Interactive vocabulary overrides, creating	Windows NT server jde.ini settings,
an interactive vocabulary override, 11-7	16-53
	workstation jde.ini settings, 16-3
J	[DEBUG]
J	AS/400 server jde.ini settings, 16-24
	UNIX server jde.ini settings, 16-39
jas.ini file	workstation jde.ini settings, 16-6
[CACHE], server jas.ini settings for Java	[DEBUG] - Intel Processor, 16–53
Server, 16–77	[EVEREST], workstation jde.ini settings,
[CONNECTION POOLS], server jas.ini	16-8
settings for Java Server, 16-78	[INSTALL]
[DB SYSTEM SETTINGS], server jas.ini	AS/400 server jde.ini settings, 16–25
settings for Java Server, 16-83	understanding Windows NT server
[JDBC DRIVERS], server jas.ini settings for	jde.ini settings, 16–55
Java Server, 16–80	UNIX server jde.ini settings, 16–40
[JDBC URL], server jas.ini settings for Java	workstation jde.ini settings, 16-8
Server, 16–79	[JDE_CG]
[JDENET], server jas.ini settings for Java	Windows NT server jde.ini settings,
Server, 16–81	16–56
[LOGS], server jas.ini settings for Java	workstation jde.ini settings, 16-9
Server, 16–82	[JDEIPC]
[OWWEB], server jas.ini settings for Java	AS/400 server jde.ini settings, 16–26
Server, 16–74	UNIX server jde.ini settings, 16–40
[SECURITY], server jas.ini settings for	Windows NT server jde.ini settings,
Java Server, 16–85	16–56
[SERVER COMPONENTS], server jas.ini	[JDEMAIL]
settings for Java Server, 16-80	AS/400 server jde.ini settings, 16–26
[SERVER], server jas.ini settings for Java	UNIX server jde.ini settings, 16–41
Server, 16–82	Windows NT server jde.ini settings,
optional settings for the ActivEra Portal,	16–57
16–86	workstation jde.ini settings, 16–10
Java Server, jas.ini settings, 16–73	[JDENET]
	AS/400 server ide ini settings 16–26

server jde.ini settings for WebSphere,	workstation jde.ini settings, 16-13
16–69	[SERVER ENVIRONMENT MAP]
UNIX server jde.ini settings, 16-41	UNIX server jde.ini settings, 16-48
user-definable settings, 2-10	Windows NT server jde.ini settings,
Windows NT server jde.ini settings,	16–66
16–57	[SVR]
workstation jde.ini settings, 16-10	AS/400 server jde.ini settings, 16–32
[JDENET KERNEL DEF13], server jde.ini	UNIX server jde.ini settings, 16-48
settings for WebSphere, 16–69	Windows NT server jde.ini settings,
[JDENET KERNEL DEFx], 2–17	16–66
AS/400 server jde.ini settings, 16–27	workstation jde.ini settings, 16–14
purpose of settings, 2–11	[TAM], UNIX server jde.ini settings, 16–49
UNIX server jde.ini settings, 16–42	[TAPI], workstation jde.ini settings, 16–15,
user-definable settings, 2–11	16–16
Windows NT server jde.ini settings,	[TCENGINE], AS/400 server jde.ini
16–58	settings, 16–32
[LOCK MANAGER]	[UBE]
AS/400 server ide.ini settings, 16–30	AS/400 server jde.ini settings, 16–32
UNIX server jde.ini settings, 16–47	Windows NT server jde.ini settings,
Windows NT server jde.ini settings,	16–67
16–64	workstation jde.ini settings, 16–16
workstation jde.ini settings, 16–11	[WORKFLOW]
[MEMORY DEBUG], UNIX server jde.ini	AS/400 server jde.ini settings, 16–33
settings, 16–47	UNIX server jde.ini settings, 16–50
[MQSI], server jde.ini settings for	workstation jde.ini settings, 16–16
WebSphere, 16–70	[WORLD ENVIRONMENT MAP], AS/400
[NETWORK QUEUE SETTINGS]	server jde.ini settings, 16–34
AS/400 server jde.ini settings, 16–30	changing for user security, 10–68
OneWorld printing considerations, 6–5	changing the timeout value, 10–70
UNIX server jde.ini settings, 16–47	
Windows NT server jde.ini settings,	changing the workstation file for
16–64	security, 10–68
	enabling and disabling unified logon, 10–79
workstation jde.ini settings, 16–11	
[NLS], Windows NT server jde.ini settings,	enterprise server, changing security,
16–65	10–70
[OBJECT LIBRARIAN], workstation jde.ini	jdenet_k settings, 2-8
settings, 16–12	jdenet_n settings, 2–7
[OFFLINE DB SYSTEM SETTINGS],	locating the file, 16–2
workstation jde.ini settings, 16–5	overview, 16–1
[PORTAL], workstation jde.ini settings,	purpose of [JDENET] settings, 2–10
16–12	settings for JDENet middleware, 2–7
[PORTALENVMAP], workstation jde.ini	JDEBASE database middleware
settings, 16–13	definition, 2–1
[REPLICATION], workstation jde.ini	features, 2–21
settings, 16–13	overview, 2–21
[SECURITY], 10–69	process flow, 2–22
AS/400 server ide ini settings, 16–31	JDENet communication middleware
UNIX server jde.ini settings, 16–48	application layer, 2–3
Windows NT server jde.ini settings, 16–65	definition, 2–1 features, 2–3
10-03	rearries z=0

jde.ini file settings, 2-/	K
load-balancing design, 2-16	
KERNEL Processes, 2–17	KEDNEL
NET Processes, 2–16	KERNEL processes, load balancing, 2–17
network layer, 2-3	Kernel processes, understanding in
process flow, 2–12	OneWorld, 2–6
transport layer, 2–3	
types	L
message-based, 2-4	L
socket-based, 2-4	
jdenet_k, jde.ini file settings, 2-8	Language
jdenet_n, jde.ini file settings, 2-7	copying data dictionary to the enterprise
Job expiration specifications, overriding	server, 3–72
specifications, 12–19	recreating replicated data dictionary files,
Job launcher, turn on or off, 12–40	3–72
Job monitor, turn on or off, 12–40	Languages
Job monitor and job launcher, turn on or	changing menu text, 8-26
turn off, 12–40	modifying language preference, 9-10
Job monitor loops, using with the	Launch loops, using with the Scheduler
Scheduler server, 12–36	server, 12–35
Job priority, changing job priority, 7–5	Library List – User (F00092), 9–4
Job records, viewing for OneWorld	Library List Control (F0093), 9-4
subsystems, 7–19	Library List Master (F0094), 9-4
Jobs	Line printers
changing launch status, 12-29	designing reports to run on line printers,
changing printer, 7-5	6–35
changing priority, 7–5	setting up a line printer, 6-37
defining resubmission time, 12-20	Linking menus, 8–21
holding jobs, 7–10	Load balancing of KERNEL processes, 2-17
overriding expiration specifications,	Load balancing of NET processes, 2-16
12–19	Locating OneWorld subsystems running on
printing jobs, 7–6	a server, 7–17
releasing jobs, 7–11	Log files
resetting the job schedule, 12–32	location on server, 6–27
reviewing all or local jobs, 12–14	setting default directory on server, 6–27
reviewing schedules, 12–27	Logging, 5–12
revising a scheduled job, 12–9	controlling detail, 5-31
scheduling a recurring job, 12–6	Logging Detail, controlling, 5–31
scheduling jobs, 12–3	Logging Failure, controlling development in
setting the status manually, 12–31	event of, 5–33
terminating jobs, 7–9	Logging System, 5–12
viewing job details, 12–30	Logs
working with job properties, 12–17	creating for your report, 6–28
working with the job schedule, 12–27	generating for reports, 6–27
Just-in-time replication, 3–16	viewing logs for a job, 7–8

M	understanding menus, 8–1 working with menu selection revisions,
Media Object Queues (F98MOQUE), 13–10 Media object tables, definition, 13–10 Media objects adding a media object queue, 13–11 defining queue location, 13–13 deleting a queue, 13–13 enabling media objects, 13–18 enabling OneWorld to use media objects, 13–3 image media objects, 13–9 media object tables, 13–10 OLE media objects, 13–10 OneWorld text items, 13–11 setting up imaging, 13–15 typical process flow for imaging, 13–16 URL media objects, 13–10 using standard processing, 13–4 working with queues, 13–9 Media objects and imaging, overview, 13–1 Media Objects Storage (F00165), 4–3, 13–3, 13–11 Menu, reviewing selections, 8–6 Menu design tables, 8–2 F0082 (Menu Master), 8–2 F0083 (Menu Text Override), 8–2 F0084 (Menu Path), 8–2 Menus adding a OneWorld report selection,	working with menu selections, 8–9 working with menus, 8–3 Message-based communication, 2–4 Middleware JDEBASE database definition, 2–1 features, 2–21 overview, 2–21 JDENet communication definition, 2–1 understanding, 2–3 overview, 2–1 Modifying a notification subscription, 5–54 Modifying a user role, 5–21, 9–25 Modifying an existing daylight savings rule 12–45 Modifying an existing printer, 6–22 Modifying an object's save location, 5–47 Modifying daylight savings rules, 12–43 Modifying OneWorld barcode printer information, 6–32 Modifying the jde.ini file to enable or disable unified logon, 10–79 Modifying the Scheduler server and monitor sleep time, 12–41 Modifying workstation jde.ini files, 3–58 Modifying workstation jde.ini files, 3–58 Multiple users, add, 9–6
8–15 adding a Windows application, 8–18 adding a WorldVision application, 8–16	N
adding an application, 8–12 adding or changing a menu selection, 8–9 changing menu selection text, 8–28 changing menu text for languages, 8–26 copying a menu selection, 8–25 creating a web view subheading, 8–20 defining new menus, 8–3 defining the menu selection, 8–12 designing menus, 8–1 filtering menus, 8–1 linking another menu, 8–21 naming a menu selection, 8–10 printing a report, 8–6 renumbering a menu selection, 8–29	Naming a menu selection, 8–10 Naming conventions data sources, 15–1 package names, 15–2 path codes, 15–1 server names, 15–2 workstation names, 15–2 NET processes, load balancing, 2–16 Network administrators, 1–4 consultants, 1–4 Network layer, JDENet communication middleware, 2–3

Network processes, understanding in	modifying, 5-54
OneWorld, 2–5	overview, 5–13
Non-Object Librarian objects	sorting, 5–55
examples, 5–5	object action notifications
managing using default project, 5-5	disabling, 5–49
Object Librarian objects, distinguished	enabling, 5–49
from, 5–4	overview, 5–13
Notification subscriptions	Object Librarian objects, 5-4
adding, 5–50	object save location
deleting, 5-55	adding, 5–45
modifying, 5–54	creating, 5–45
overview, 5–13	deleting, 5–48
sorting, 5–55	modifying, 5–47
Notifications, object action, 5–13	overview, 5–13
	object transfer activity rules, overview,
	5–38
0	overview, 5–1
	project constants
Object Action Notification	overview, 5–13
disabling, 5–49	setting up, 5–33
enabling, 5–49	project promotion life cycle, 5-85
overview, 5–13	project status activity rules
Object Librarian objects	overview, 5–35
examples, 5–4	setting up, 5–35
non-Object Librarian objects,	projects
distinguished from, 5–4	default projects, 5–3
Object Management Workbench	overview, 5–3
activity rules, overview, 5–12	SAR integration, disabling, 5-29
allowed (user) actions	security application, 5-14
configuring, 5–17	tokens, overview, 5-6
overview, 5–5	user roles
setting up, 5–23	adding, 5–18
concepts, 5–3	configuring, 5–17
configuration	deleting, 5–22
options, 5–9	modifying, 5–21
settings indicators, 5–16	overview, 5–5
workflow, 5–10	securing, 5–14
default projects	Object save locations
moving objects, 5–4	adding, 5–45
object research and development, 5–4	creating, 5–45
development, controlling, 5–33	deleting, 5–48
logging detail, controlling, 5–31	modifying, 5–47
logging system, 5–12	overview, 5–13
non-Object Librarian objects	Object transfer activity rules, overview,
managing using default project, 5–5	5–38
overview, 5–4	Object-level security, 10-6
notification subscriptions	Objects
adding, 5–50	adding save location, 5–45
deleting, 5–55	creating a save location, 5-45
ac.co6, 7 77	deleting save location, 5-48

enabling action notification, 5-49	PDF files
modifying save location, 5-47	location on server, 6-27
moving out of default project, 5-4	setting default directory on server, 6-27
saving locations, 5–13	Pending Change Log, viewing unreceived
security, 10–7	publisher changes, 3–62
OLE media objects, definition, 13–10	Planning data replication, 3–8
OLE objects, defined, 13–1	Printers, AS/400, printing multiple copies to
OneWorld	a remote printer, 6–37
roles, understanding, 1-3	Printing
understanding dedicated process design,	adding a printer, 6–7
2–6	changing a printer, 7–5
understanding kernel processes, 2-6	copying an existing printer, 6–23
understanding network processes, 2–5	copying barcode printer information for
understanding process-based design, 2–5	a new printer, 6–32
OneWorld Explorer, adding or changing	defining a default printer, 6–20
web addresses in help, 8–19	deleting a paper type, 6–25
OneWorld naming conventions, 15–1	deleting a printer, 6–24
OneWorld reports, printing, 6–1	deleting barcode support information for
OneWorld Security (F98OWSEC), 10–1,	a printer, 6–33
10-42, 10-43	designing reports to run on line printers,
OneWorld subsystems	6–35
enabling, 7–16	determining logical printers attached to
ending OneWorld subsystems, 7–21	batch processes, 6–26
locating subsystems running on a server,	jobs, 7–6
7–17	modifying an existing printer, 6-22
stopping OneWorld subsystems, 7–20	modifying barcode printer information,
terminating, 7–20	6–32
understanding, 7–13	overview, 6–1
viewing job records, 7–19	printing a menu report, 8-6
working with OneWorld subsystems,	print-time characteristics, 6–5
7–13	searching for incorrect printer records,
OneWorld text items, definition, 13-11	6–25
Overriding batch application specifications,	setting up a line printer, 6-37
12–22	setting up OneWorld to use a barcode
Overriding job expiration specifications,	font, 6–31
12–19	settings for the workstation jde.ini file,
Overriding the environment, 12–17	6–5
	terminating jobs, 7–9
	understanding OneWorld printing, 6-3
P	viewing logs for a job, 7–8
	viewing reports online, 7–7
Dealtage names naming conventions 15.2	working with the printers application,
Package names, naming conventions, 15–2	6–7
Passwords	Printing multiple copies to a remote printer
change signon (administrators only),	6–37
10–62	Printing the Scheduled Jobs or Purge
reset signon (administrators only), 10–62	Scheduled Jobs report, 12–47
understanding encryption, 10–42	PrintQueue directory, location on server,
Path codes, naming conventions, 15–1	6–27

Processes, OneWorld dedicated processes,	Pull subscribers, viewing subscribers who
2–6	have not retrieved their changes, 3-63
Processing, using standard processing for	Purge Scheduled Jobs report, 12-47
media objects, 13-4	Push replication, 3–19
Processing option security	
adding security, 10-27	
changing security, 10-28	R
definition, 10–5	
setting up security, 10–25	Pograta Paplicated Data Dictionary
Processing options	Recreate Replicated Data Dictionary (R92TAM)
entering for Scheduler, 12-12	
R92TAM, 3-75	copying data dictionary files to a server, 3–72
setting up for user security, 10-54	-
understanding for user profiles, 9-17	processing options, 3–75 Recreating replicated data dictionary files,
Work with Servers (P986116), 7-11	
Profiling, 9–3	3–72 Refreshing the data dictionary, 4–9
Programs and IDs	•
P0082 (Menu Design), Menu Header	Refreshing the Scheduler server settings, 12–41
Revisions, 8–4	
processing options, Work with Servers	Releasing jobs, 7–11
(P986116), 7–11	Remote printers, printing multiple copies on the AS/400, 6–37
Project constants	·
overview, 5–13	Removing a service for unified logon, 10–81
setting up, 5–33	Removing action security, 10–19
Project leaders, application, 1–3	Removing action security, 10–19 Removing data sources for users, groups, or
Project promotion life cycle for Object	all users, 10–68
Management Workbench, 5-85	Removing exit security, 10–34
Project status activity rules	Removing exit security, 10–54 Removing security from an application,
overview, 5–35	10–13
setting up, 5–35	Removing security from processing options,
Projects	10–28
default projects, 5–3	Removing tab security, 10–31
overview, 5–3	Renumbering a menu selection, 8–29
Properties, viewing column properties,	Replicated table, 3–5
14–7	Replication all changes to the data
Published table, definition, 3–5	dictionary, 4–9
Publisher	Replicating data dictionary changes,
adding, 3–28	overview, 3–65
deleting, 3–30	Replicating data dictionary changes to
Publisher machine, definition, 3–5	servers, 4–7
Publisher Revisions form, 3–29	Replication logs, viewing, 3–60
Publishers	Reports
copying with associated subscribers, 3-41	adding values to report interconnect,
creating using a batch process, 3-39	12–24
enabling and disabling all publishers,	checking status, 7–4
3-37	creating logs for your reports, 6–28
servers used as publishers and	designing for line printers, 6–35
subscribers, 3–25	generating logs, 6–27
Pull replication, 3–14	printing a menu report, 8–6

retrieving logs, 6–27	S
running on the server, 6–4	
running on the workstation, 6–4	
running Scheduler reports, 12–47	SAR, disabling integration, 5–29
running the Create User Profiles from	Save location
A/B Records (R0092) report, 9–18	adding, 5–45
running the Security Analyzer Report	creating, 5–45
(R98OWSECA), 10–73	deleting, 5–48
running the User Profiles Summarization	modifying, 5–47
Report (R00921), 9–20	Save locations, overview, 5–13
viewing online, 7–7	Scheduled Jobs report, 12–47
Requiring signon security, 10–65	Scheduler
Resetting all vocabulary overrides in an	adding values to a report interconnect,
application (interactive and batch), 11–17	12–24
Resetting all vocabulary overrides on a	changing job launch status, 12–29
form (interactive), 11–16	control records, 12–33
Resetting signon passwords (administrators	daylight savings rules
only), 10–62	adding a new rule, 12–43
Resetting the Environment Selection form,	modifying an existing rule, 12-45
10–80	modifying rules, 12–43
Resetting the job schedule, 12–32	defining resubmission time, 12-20
Resetting the Scheduler server, 12–41	dispatch functions, 12-34
Resetting vocabulary overrides, 11–15	entering processing options, 12–12
Reviewing all job schedules, 12–27	job monitor loops, 12–36
Reviewing all jobs or local jobs, 12–14	launch loops, 12–35
Reviewing security history, 10–64	overriding batch application
Reviewing selections for a menu, 8–6	specifications, 12–22
Reviewing vocabulary overrides, 11–13	overriding job expiration specifications,
Revising a scheduled job, 12–9	12–19
Revising all user security, 10–62	overriding the environment, 12–17
Revising signon security, 10–60	overview, 12–1
Revising user security, 10–53	reports
Row security	printing the Scheduled Jobs or Purge
definition, 10–5	Scheduled Jobs report, 12–47
setting up security, 10–20	running reports, 12–47
Running Scheduler reports, 12–47	resetting the job schedule, 12–32
Running the Create User Profiles from A/B	reviewing all jobs or local jobs, 12–14
Records (R0092) batch application, 9–18	reviewing job schedules, 12–27
Running the Security Analyzer by Data	revising a scheduled job, 12-9
Source Report, 10–75	scheduling a recurring job, 12-6
Running the Security Analyzer by User or	scheduling jobs, 12–3
Group Report, 10–76	setting job status manually, 12–31
Running the Security Analyzer Report	understanding the Scheduler server,
(R98OWSECA), 10–73	12–33
Running the User Profiles Summarize	viewing job details, 12–30
Report (R00921), 9–20	working with job properties, 12–17
	working with the job schedule, 12–27
	Scheduler server
	modifying the sleep time, 12–41
	overview, 12–39

refreshing the settings, 12–41	revising signon security, 10–60
resetting, 12–41	setting up action security, 10-16
stopping or restarting, 12–40	setting up exit security, 10-31
Scheduling a recurring job, 12–6	setting up external calls security, 10-36
Scheduling jobs, 12–3	setting up for an exclusive application,
Searching for incorrect printer records, 6–25	10-34
Security	setting up processing option security,
access to security tables, 10-42	10-25
adding action security, 10-18	setting up row security, 10–20
adding exit security, 10–33	setting up security, 10–43
adding to a tab, 10–30	setting up tab security, 10–28
adding to an application, 10–12	signon security for web users, 10–49
adding to processing options, 10–27	types
application, 5–14	action security, 10–5
changing action security, 10–19	application security, 10–5
changing exit security, 10–33	column security, 10–5
changing for an application, 10–12	object-level security, 10–6
changing for processing options, 10–28	processing option security, 10–5
changing tab security, 10–31	row security, 10–5
coexistence with WorldSoftware, 10–7	understanding cached information, 10–4
copying a single record for a user or	understanding signon security, 10–41
group, 10–39	understanding types of security, 10–5
copying for a user or group, 10–38	understanding users, group, and
copying user security, 10–59	*PUBLIC, 10–3
creating user security, 10–55	user roles, 5–14
deleting access on the Exclusive	user security
Application Security form, 10–35	adding and revising data sources,
deleting on the Row Security Revisions	10-66
form, 10–23	changing the jde.ini file, 10–68
deleting security on the Work with	working with user security, 10–53
User/Group form, 10–40	workstations, changing the jde.ini file,
deleting user security, 10–61	10–68
enterprise servers, changing the jde.ini	Security Analyzer by Data Source Report,
file, 10–70	running the report, 10–75
how OneWorld checks security, 10–4	Security Analyzer by User or Group Report,
identifying users and objects, 10–7	10–76
overview, 10–1	Security Analyzer Report (R98OWSECA),
process flow for signon security, 10–44	10–73
processing options, setting up for user	Security Workbench
security, 10–54	understanding, 10–3
removing action security, 10–19	working with Security Workbench, 10–9
removing data sources for users, group,	Selective replication, 3–26
or all users, 10–68	Server Administration Workbench, relation
removing exit security, 10–34	to JDENet load-balancing, 2–18
removing exit security, 10–34 removing from a tab, 10–31	Server jobs, working with server jobs
removing from an application, 10–13	application, 7–3
removing from processing options, 10–13	Servers
requiring signon security, 10–65	
reviewing history, 10–64	as publishers and subscribers, 3–25 copying data dictionary files using
revising for all users, 10–62	TAMFTP.exe, 3–72
TO VIOLITE TOT ALL GOODS, TO OA	1/11/11 11.CAC, J /4

naming conventions, 15-2	requiring security, 10-65
push replication, 3–19	revising security, 10-60
running reports, 6–4	understanding, 10–41
transferring data dictionary files, 3-73	web user signon security, 10-49
understanding the Scheduler server,	Socket-based communication, 2-4
12–33	Solution Explorer security, 10-95
workgroup servers on a WAN, 3-24	configuring security, 10–97
Services	default settings, 10–97
removing for unified logon, 10-81	settings, 10–95
setting up for unified logon, 10-80	viewing security settings, 10-96
Setting ActivEra Portal component	Solution Explorer security settings, 10–95,
permissions, 10–92	10–96
Setting the job status manually, 12–31	Sorting notification subscriptions, 5–55
Setting up a line printer, 6–37	Steps for setting up security, 10–43
Setting up a OneWorld printer to use a	Stopping OneWorld subsystems, 7–20
barcode font, 6-31	Stopping or restarting the Scheduler server,
Setting up a printer, AS/400, printing	12-40
multiple copies to a remote printer, 6–37	Subheading, creating a web view
Setting up a service for unified logon,	subheading on a menu, 8-20
10-80	Subscriber machine, definition, 3–5
Setting up action security, 10-16	Subscriber Revisions, forms, 3–32
Setting up allowed (user) actions, 5–23	Subscribers
Setting up application security, 10–10	adding, 3–31
Setting up column security, 10–23	creating using a batch process, 3-39
Setting up data dictionary replication on the	deleting, 3–36
workstation, 4–5	deleting individual subscribers, 3-36
Setting up data replication, 3–27	enabling and disabling all subscribers,
Setting up exclusive application security,	3–37
10-34	enabling and disabling for one publisher,
Setting up exit security, 10–31	3–38
Setting up external calls security, 10-36	enabling and disabling selected
Setting up imaging, 13–15	subscribers, 3–39
Setting up processing option security, 10–25	servers used as publishers and
Setting up processing options for user	subscribers, 3–25
security, 10–54	synchronizing and unsynchronizing, 3-34
Setting up project constants, 5–33	synchronizing and unsynchronizing for
Setting up project status activity rules, 5–35	one publisher, 3–35
Setting up row security, 10-20	synchronizing and unsynchronizing for
Setting up tab security, 10–28	selected subscribers, 3-36
Setting up unified logon, 10-78	Subscriptions
Setting up user profiles, 9–9	adding notification, 5-50
Setting up user roles, 9–21	notification, 5–13
assigning a role, 9-23	sort notification, 5–55
creating a role, 9-22	Subsystems
deleting a role, 9-24	enabling OneWorld subsystems, 7-16
implementing roles, 9-22	ending OneWorld subsystems, 7-21
modifying a role, 9-25	locating subsystems running on a server,
Shortcuts, media object, 13-2	7–17
Signon security	stopping OneWorld subsystems, 7-20
process flow, 10-44	terminating OneWorld subsystems, 7–20

understanding, 7–13	Library List – User (F0092), 9–4
working with OneWorld subsystems,	Library List Control (F0093), 9-4
7–13	Library List Master (F0094), 9-4
Synchronization, 3–7	Media Object Queues (F98MOQUE),
Synchronize All form, 3–34	13–10
Synchronize Subscribers form, 3–35	Media Objects Storage (F00165), 4-3,
Synchronizing	13-3, 13-11
coexistence data dictionaries, 4-11	Menu Master (F0082), 8-2
selected subscribers, 3-36	Menu Path (F0084), 8-2
subscribers, 3–34	Menu Selection (F00821), 8-2
subscribers for one publisher, 3-35	Menu Text Override (F0083), 8-2
WorldSoftware and OneWorld data	OneWorld Security (F98OWSEC), 10-1,
dictionaries, 4–11	10-42, 10-43
System Administration Guide, overview,	Security Workbench (F00950), 10-1, 10-4
1–1	User Access Definition (F00925), 9-4
	User Display Preferences (F00921), 9-4
_	User Display Preferences Tag (F00922),
T	9–4
	user profiles application tables, 9–3
Tab security	viewing column properties, 14-7
adding security, 10–30	viewing data, 14–3
changing for a tab, 10–31	TAMFTP, transferring data dictionary files,
removing from a tab, 10–31	3–73
setting up security, 10–28	TAMFTP.exe, copying data dictionary files
Table conversions, used with selective	to a server, 3–72
replication, 3–26	Terminating jobs, 7–9
Tables	Terminating OneWorld subsystems, 7–20
Data Dictionary – Error Messages	Third-party software
(F9207), 4–3	administrators, 1–4
Data Dictionary – Smart Fields (F9212),	consultants, 1–4
4–3	Tokens, overview, 5–6
Data Field Display Text (F9202), 4-3	Transferring data dictionary files, 3–73
Data Field Specifications (F9210), 4–3	Transport layer, JDENet communication
Data Item Alpha Descriptions (F9203),	middleware, 2–3
4–3	Troubleshooting, data dictionary, 4–10
Data Item Master (F9200), 4-3	
Data Replication Change Log	U
(F98DRLOG), 3-6, 3-63, 4-7	0
Data Replication Pending Change	
Notifications (F98DRPCN), 3-6, 3-63	Understanding AS/400 server INI settings,
Data Replication Publisher (F98DRPUB),	16–19
3–5	Understanding data replication, 3–3
Data Replication Subscribers	Understanding how OneWorld checks
(F98DRSUB), 3–5	security, 10–4
Data Replications Pending Change	Understanding Java Server jas.ini settings,
Notifications (F98DRPCN), 4–7	16–73
for designing menus, 8–2	Understanding OneWorld printing, 6–3
Imaging Constants (F98101), 13–10,	Understanding OneWorld roles, 1–3
13–16	Understanding OneWorld subsystems, 7–13

Understanding password encryption, 10-42	User Display Preferences Tag (F00922), 9-4
Understanding processing option for user	User profiles
profiles, 9–17	assigning business preferences, 9-16
Understanding security	assigning environments to user profiles,
ActivEra Portal configuration, 10-83	9–14
configuring security, 10–83	copying user profiles, 9-13
configuring toolbars, 10–84	creating and modifying user profiles,
setting component permissions, 10-92	9–10
setting workspace permissions, 10-91	creating user profiles, 9-10
Solution Explorer security, 10-95	creating using a batch process, 9-18
configuring security, 10–97	how group profiles make profiling easier,
default settings, 10-97	9–3
security settings, 10-95	modifying user profiles, 9-10
viewing security settings, 10-96	overview, 9–1
Understanding server jde.ini settings for	running Create User Profiles for A/B
WebSphere, 16–69	Records (R0092) report, 9-18
Understanding signon security, 10–41	setting up, 9–9
web user signon security, 10-49	setting up user roles, 9-21
Understanding the Scheduler server, 12–33	assigning a role, 9–23
Understanding UNIX server jde.ini settings,	creating a role, 9-22
16–35	deleting a role, 9-24
Understanding user profiles, 9–3	implementing roles, 9-22
Understanding Windows NT enterprise	modifying a role, 9–25
server jde.ini settings, 16–51	tables used by the application, 9-3
Understanding workstation jde.ini settings,	understanding, 9–3
16–3	understanding processing options, 9-17
Unified logon, 10–41	User Profiles Summarization Report
enabling and disabling in the jde.ini file,	(R00921), running the report, 9–20
10-79	User roles
removing a service, 10-81	adding, 5–18
setting up a service, 10-80	configuring, 5–17
setting up unified logon, 10-78	deleting, 5–22
Universal Table Browser	modifying, 5–21
example of column properties, 14-8	overview, 5–5
example of formatted data, 14-7	securing, 5–14
example of unformatted data, 14-6	setting up, 9–21
overview, 14–1	User security
viewing column properties in a table,	adding and revising data sources, 10-66
14–7	changing the jde.ini file, 10-68
viewing data in tables, 14-3	copying a single security record, 10-39
UNIX, enterprise server jde.ini settings,	copying security, 10–38, 10–59
16–35	creating security, 10–53, 10–55
Unsynchronizing	deleting security, 10-61
selected subscribers, 3–36	identifying users, 10–7
subscribers, 3–34	overview, 10–3
subscribers for one publisher, 3–35	removing data sources for security, 10-68
Updating display decimals, 4-13	revising data sources, 10-67
URL media objects, 13–10	revising for all users, 10-62
User Access Definition (F00925), 9–4	revising security, 10–53
User Display Preferences (F00921), 9–4	setting up processing options, 10–54

working with user security, 10-53 Windows, adding to a menu, 8-18 Using standard processing for media Windows NT objects, 13-4 enterprise server jde.ini file settings, 16 - 51unified logon authentication, 10–41 V Work With Batch Versions form, 4–14 Work With Publishers form, 3–29 Work with server jobs application, checking Viewing data in tables, 14–3 report status, 7-4 Viewing job details, 12-30 Work with Servers (P986116) Viewing logs for a job, 7-8 overview, 7-1 Viewing OneWorld subsystem job records, processing options, 7-11 7-19 Work with Servers form Viewing outstanding changes for a given changing the priority and printer for host, 3-60 jobs, 7-5 Viewing pull subscribers who have not checking the status of reports, 7–4 retrieved their changes, 3-63 printing jobs, 7-7 Viewing replication logs, 3–60 Work With Subscribers form, 3-31 Viewing reports online, 7-7 Work with User/Group form, 10–40 Viewing unreceived publisher changes, Workflow, configuration, 5–10 3-62 Workgroup servers Vocabulary overrides on a wide area network, 3-24 accessing from Object Librarian, 11-5 setting up data replication for accessing from System Administration non-OneWorld servers, 3-50 Tools, 11-3 Working with job properties, 12–17 accessing vocabulary overrides, 11-3 Working with media objects queues, 13-9 creating a batch vocabulary override, Working with menu selection revisions, 8-25 creating an interactive vocabulary Working with menu selections, 8–9 override, 11-7 Working with menus, 8–3 creating vocabulary overrides, 11-7 Working with OneWorld subsystems, 7–13 overview, 11-1 Working with Security Workbench, 10-3, resetting all overrides in an application 10 - 9(interactive and batch), 11–17 Working with Server Jobs application, resetting all overrides on a form overview, 7-3 (interactive), 11-16 Working with the job schedule, 12–27 resetting vocabulary overrides, 11-15 Working with the printers application, 6-7 reviewing vocabulary overrides, 11-13 Working with the Scheduler server, 12–39 Working with user security, 10-53 Workstation W running reports on the workstation, 6-4 security, changing the timeout value, Web 10 - 70adding or changing addresses, 8-19 Workstations creating a web view subheading on a changing the jde.ini file for security, menu, 8-20 10 - 68WebSphere, enterprise server jde.ini file naming conventions, 15–2 settings, 16-69 pull replication, 3-14 Wide area network, workgroup servers on replicating data dictionary changes, 4-4 a WAN, 3-24 setting up forced synchronization, 3-59

understanding jde.ini settings, 16–3 WorldSoftware, coexistence and security, 10–7 WorldVision, adding an application to a menu, 8–16

