

PeopleSoft®

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System Administration
PeopleBook

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Overview to System Administration

Overview to System Administration

The guides that comprise the *Configuration Planning and Setup* suite are designed for use by Configurable Networking Computing (CNC) specialists, ERP 8.0 system administrators, and network or server administrators. The assumption throughout these guides is that the initial ERP 8.0 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 ERP 8.0 customer configuration
- *System Administration.* This guide is written mainly for ERP 8.0 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 ERP 8.0 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 ERP 8.0 naming conventions
 - Understanding the jde.ini file
- *Package Management.* This guide is written for ERP 8.0 system administrators and others who manage custom modifications to the ERP 8.0 environments. *Package Management* contains the following topics:

- Package management planning and setup
- ERP 8.0 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, ERP 8.0 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 ERP 8.0. See the *ERP 8.0 Installation Guide*.
- ERP 8.0 upgrade and cumulative updates. See the *ERP 8.0 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 ERP 8.0 Roles

The ERP 8.0 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 ERP 8.0 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 ERP 8.0 software throughout the company.

Custom Solution Consultant and Application Developers

ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 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.

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 protocols and vendors. 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
JDENet Communication Middleware	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) to access databases of different vendors. These APIs are used in two ways: <ul style="list-style-type: none">• By ERP 8.0 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. ERP 8.0 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, ERP 8.0 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 <i>Hardware and Software Requirements</i> sections of the platform-specific <i>ERP 8.0 Installation Guide</i> .

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:

Protocol Layer	Description
Network layer	Handles addressing and routing information, error checking, and retransmission requests.
Transport	Provides connection-oriented data-delivery services across networks. These protocols

layer	provide end-to-end data exchanges in which systems maintain a session or connection with each other for the reliable sequenced exchange of data.
	ERP 8.0 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.

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 ERP 8.0, 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 ERP 8.0 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 ERP 8.0 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.

ERP 8.0 Process-Based Design

In a Windows environment, although client workstations can have more than one copy of ERP 8.0 installed, only one instance of the ERP 8.0 client can be running on that machine at any one time. When communicating with a ERP 8.0 server, the ERP 8.0 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 ERP 8.0 server side, the JDENet process communicates with the ERP 8.0 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 ERP 8.0 main processes, multiple ERP 8.0 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 ERP 8.0 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 ERP 8.0 network process, referred to as a JDENET_n job. This job handles network connections and traffic for ERP 8.0.

Network Processes

The ERP 8.0 network process is called a JDENET_n job. The purpose of this constantly-running job is to handle ERP 8.0 communication messages by monitoring the network for incoming messages to ERP 8.0 and also monitoring ERP 8.0 for outgoing messages to the network. As defined in the ERP 8.0 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 ERP 8.0 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 ERP 8.0 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. ERP 8.0 uses a number of predefined and dedicated kernel types, which are essentially virtual servers. Each kernel type is responsible for a specific ERP 8.0 process.

ERP 8.0 determines an appropriate JDENET_k job to process the job based on message identifiers generated by ERP 8.0. 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.

ERP 8.0 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 - ERP 8.0 internal and testing processes
- Type 2 - ERP 8.0 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 ERP 8.0 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 ERP 8.0 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]
```

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=maximum number of connections
```

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]
Krn1PgmName=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	<p>Defines the maximum number of JDENET_n jobs that can run on this ERP 8.0 server. This value can be from 1 to n. You can increase this value for a server that is expecting heavy JDENET message flow.</p> <p>If multiple JDENET_n jobs are specified, ERP 8.0 starts the jobs as required allocating a job to each request. When the maximum number of JDENET_n processes are started, ERP 8.0 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 ERP 8.0 network processes. If, on a given server, the maximum number of connections is met, a client or server cannot initiate an additional ERP 8.0 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 ERP 8.0 session.</p> <p>Typical Value (all platforms): Dependent on the number of users.</p> <p>Related Value: maxNetConnections</p>
maxNetConnections	<p>Defines the maximum number of connections.</p> <p>Typical value (all platforms except Windows NT): 800.</p> <p>Typical value (Windows NT platforms): 400</p> <p>Related value: maxNetProcesses</p>
maxKernelProcesses	<p>Defines the maximum number of jdenet_k of processes (or jobs, depending on the platform).</p> <p>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).</p> <p>Typical value (all server platforms): Dependent on how the system is configured and on the number of users.</p> <p>Related value: maxNumberOfProcesses in each [JDENET_KERNEL_DEFx] section</p>
maxKernelRanges	<p>Defines the maximum number of kernel types that the JDENET_k job can call.</p> <p>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. ERP 8.0 preassigns each kernel type to handle a specific range of messages.</p> <p>Typical value (all server platforms): 11</p> <p>Related values: See the following tables for each [JDENET_KERNEL_DEFx] range</p>

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 ERP 8.0 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: jdekrln.dll DEF3: jdekrln.dll DEF4: jdekrln.dll DEF5: jdekrln.dll DEF6: jdewapi.dll DEF7: jdekrln.dll DEF8: jdekrln.dll DEF9: jdesaw.dll DEF10: jdekrln.dll DEF11: jdekrln.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
DEF10: libjdeschr.sl
DEF11: libjdeknet.sl

UNIX (AIX) on RS/6000 - Typical Values:

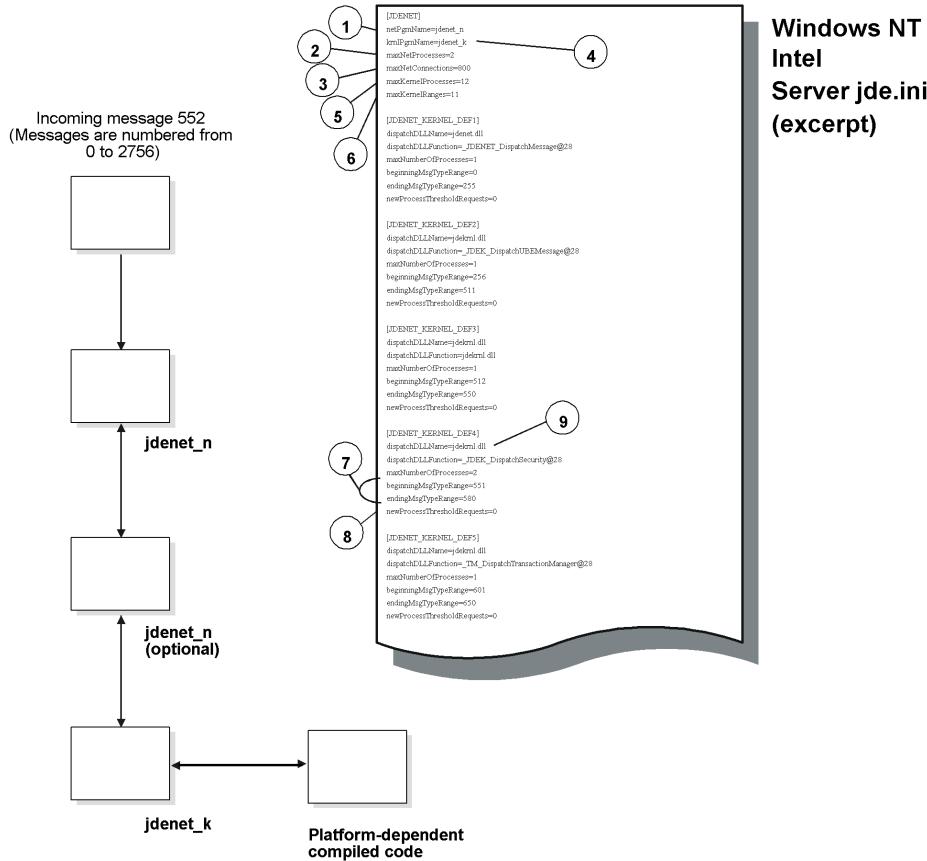
DEF1: libjdenet.so
DEF2: libjdekrnl.so
DEF3: libjdekrnl.so
DEF4: libjdekrnl.so
DEF5: libjdekrnl.so
DEF6: libjdewapi.so
DEF7: libjdekrnl.so
DEF8: libjdekrnl.so
DEF9: libjdesaw.so
DEF10: libjdekrnl.so
DEF11: libjdekrnl.so

maxNumberOfProcesses	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 from a client workstation:

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]

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]

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=22
```

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@28  
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 ERP 8.0 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 the number of 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 and other ERP 8.0 services. 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 and routing incoming jobs to the other processes.

For 200 users, you specify at least 200 as the total number of network connections required.

The controlling setting in the jde.ini file for the number of net processes is:

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

The controlling setting in the jde.ini file for the total number of connections that JDENet_n processes can handle is:

```
[JDENET]  
maxNetConnections=variable
```

The ERP 8.0 server has a mechanism for handling load balancing among net processes. The following series of steps explains the mechanism:

- First, the ERP 8.0 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 has been created, the first net process delegates new connections to the existing processes in sequential fashion.

The key factors in ERP 8.0'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_DEFx, where allowable values are from 1 to 20):

```
[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 ERP 8.0 server has a mechanism for handling load balancing for KERNEL jobs. ERP 8.0 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 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 ERP 8.0 server achieves load balancing.

Server Administration Workbench (SAW)

You can use the ERP 8.0 Server Administration Workbench (SAW) to monitor programs and observe the number of ERP 8.0 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 ERP 8.0. 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 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 ERP 8.0 processes running, such as JDENet, kernels, queues, etc.
- View incoming processing requests that are issued by ERP 8.0 clients
- Shut down ERP 8.0 running on the server, provided you are running SAW on the server
- View information about workstation and server connections
- View the ERP 8.0 workstation and server configuration settings
- Notify workstations if a server shuts down

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 ERP 8.0 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 ERP 8.0. 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.

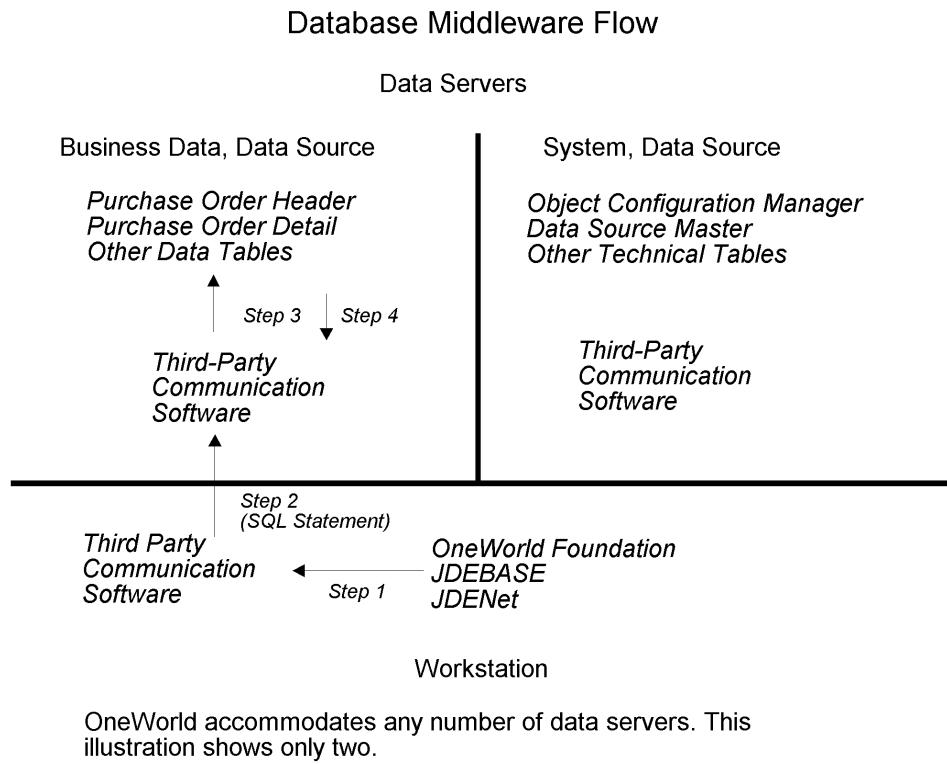
JDEBASE provides the following functions:

- 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.



10. ERP 8.0 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.
11. 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.
12. 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.
13. Finally, the third-party communication software passes data back to the JDEBASE and the ERP 8.0 Foundation processes.

Data Replication

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.

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 ERP 8.0 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 ERP 8.0 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.

Concepts of Data Replication

Key data replication concepts include:

- Understanding published tables and publisher machines
- Understanding replicated tables and subscriber machines
- Data replication changes and notification
- Synchronization of replicated data
- Caching of replicated data

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, ERP 8.0 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, ERP 8.0 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, ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0. 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 ERP 8.0 performs the forced synchronization on the workstation, ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0, ERP 8.0 reads the Data Replication Publisher table (F98DRPUB) and caches the table locally. ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 tables in a distributed data environment, you should consider that ERP 8.0 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 ERP 8.0 for distributed data and joined business views that span multiple databases. This limitation impacts any application that uses these business views.

ERP 8.0 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 ERP 8.0 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
- 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

ERP 8.0 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 ERP 8.0 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 ERP 8.0 architecture accommodates multiple languages. ERP 8.0 assigns all users a language preference key within their user profiles. The language key is a two-character field that determines the language for ERP 8.0 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 ERP 8.0:

Table	Description
F0004D	User Defined Code Types - Languages ¹
F0005D	User Defined Codes - Languages ¹
F0006D	Business Unit Alternate Description Master ²
F00090D	Supplemental Database Language Preference ²
F0012D	AAI Alternate Description Master
F0083	Menu Text Override File
F00921	Menu Path File
F0901D	Account Master Alternate Description ²
F4101D	Item Master - Alternative Description ²
F5192D	Supplier Analysis Alternate Language Description ²
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

1 This table is also considered a UDC table. This table must be replicated as a group with F0004 and F0005.

2 This is a ERP 8.0 application language table and it should be replicated as a group with the F98* tools language tables.

User Defined Code Tables

ERP 8.0 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 ERP 8.0. 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

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 ERP 8.0 tables that you cannot replicate using ERP 8.0 replication tools:

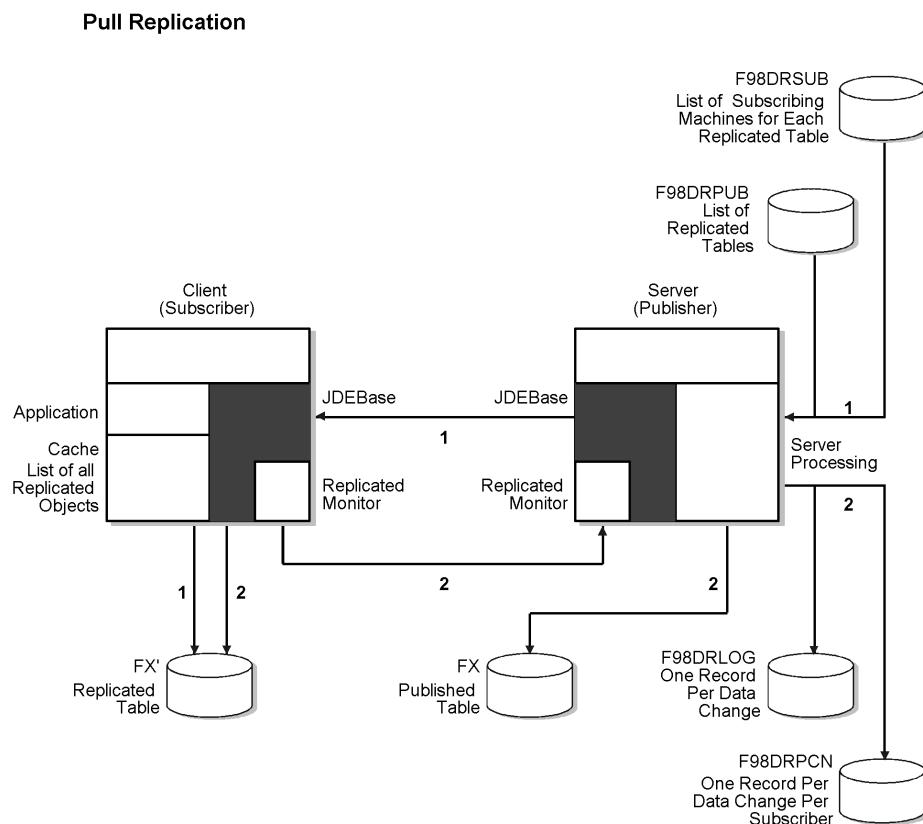
Group	Comment
Generic Text (GT) tables	As a general rule, you cannot replicate tables containing Generic Text using the ERP 8.0 replication tool, although you can consider using third-party tools. The following list provides examples of these tables: <ul style="list-style-type: none"> • GT92002 Data Dictionary - Glossary Information
System application tables	Only one copy of the next number tables, F0002 and F00021, can exist in any ERP 8.0 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 style="list-style-type: none"> • F0002 Next Numbers - Automatic • F00021 Next Numbers by Company/Fiscal Year - Auto
System tables	Typically, ERP 8.0 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 style="list-style-type: none"> • F98701 Next ID Master • F98950 User Overrides • F98DRLOG Data Replication Change Log • F98DRPCN Data Replication Pending Change Notification • F98OWSEC ERP 8.0 Security
Transaction or balance tables	J.D. Edwards does not recommend using the ERP 8.0 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 style="list-style-type: none"> • F0902 Account Balances File • F0911 Account Ledger • F4211 Sales Order Detail • F4311 Purchase Order Detail
Application worktables	Application worktables are temporary tables unique to an application session. Occasionally, ERP 8.0 uses these tables instead of temporary cached memory. The following list provides examples of these tables: <ul style="list-style-type: none"> • F40UI801 Generic Error Table • F42UI01 Sales Order Header Cache File (MBF) • F42UI11 Sales Order Detail Cache File (MBF)

Understanding Pull Replication

Pull replication is the recommended type of replication for workstations. A subscriber using pull replication must be a machine that runs ERP 8.0.

When you start ERP 8.0 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:



(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.

(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 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, ERP 8.0 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.

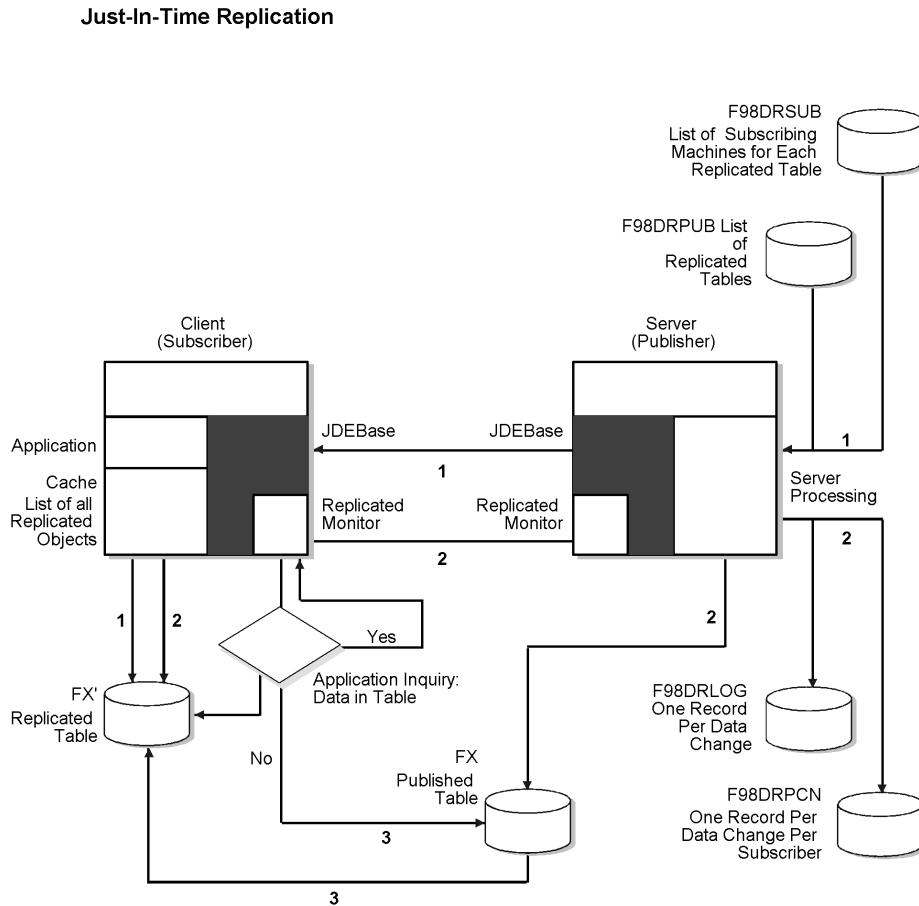
Just-in-time replication works in conjunction with the following ERP 8.0 processes:

Process	Description
Validating a user defined code field	If a search for a record in the local replicated table fails, ERP 8.0 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, ERP 8.0 validates the line type against the local copy for that table. If the data source does not contain the new line type, ERP 8.0 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, ERP 8.0 reads the data from the published table. If you select a value that does not exist in the replicated table, ERP 8.0 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, ERP 8.0 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:



(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 ERP 8.0 removes the respective entries from F98DRPCN. ERP 8.0 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).

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, ERP 8.0 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 ERP 8.0 on the subscriber.

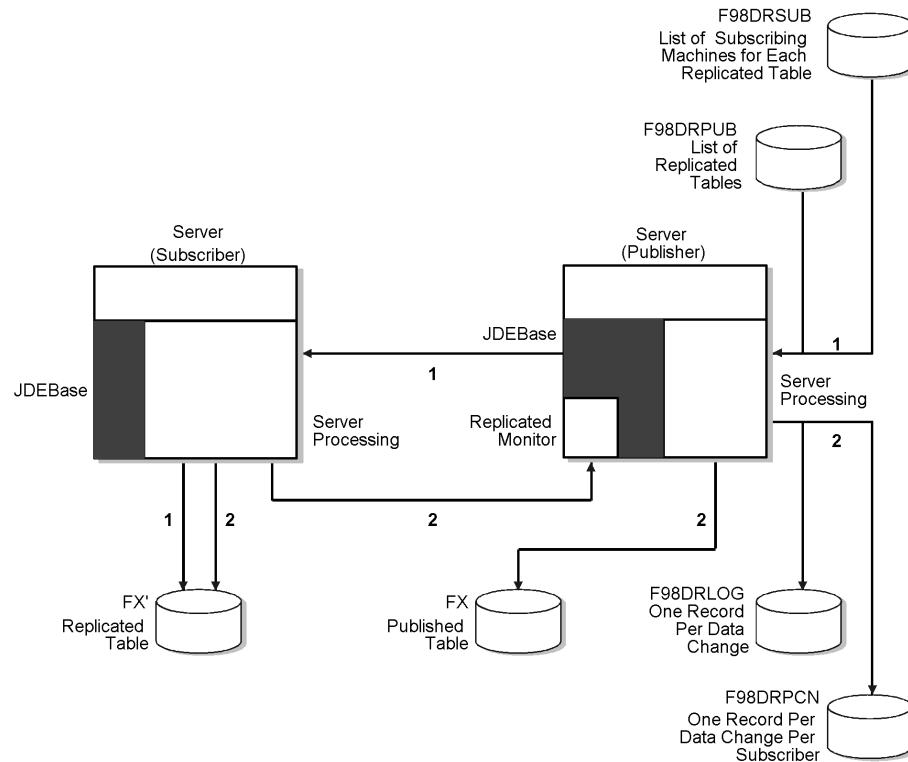
Push replication also occurs when subscriber tables change. If a valid Data Replication Publisher table (F98DRPUB) and a valid Data Replication Subscribers table (F98DRSUB) exist in cache on the workstation making the change, ERP 8.0 records replication changes in the Data Replication Change Log (F98DRLOG) 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 ERP 8.0 server code. The server only supports a database.

Important:

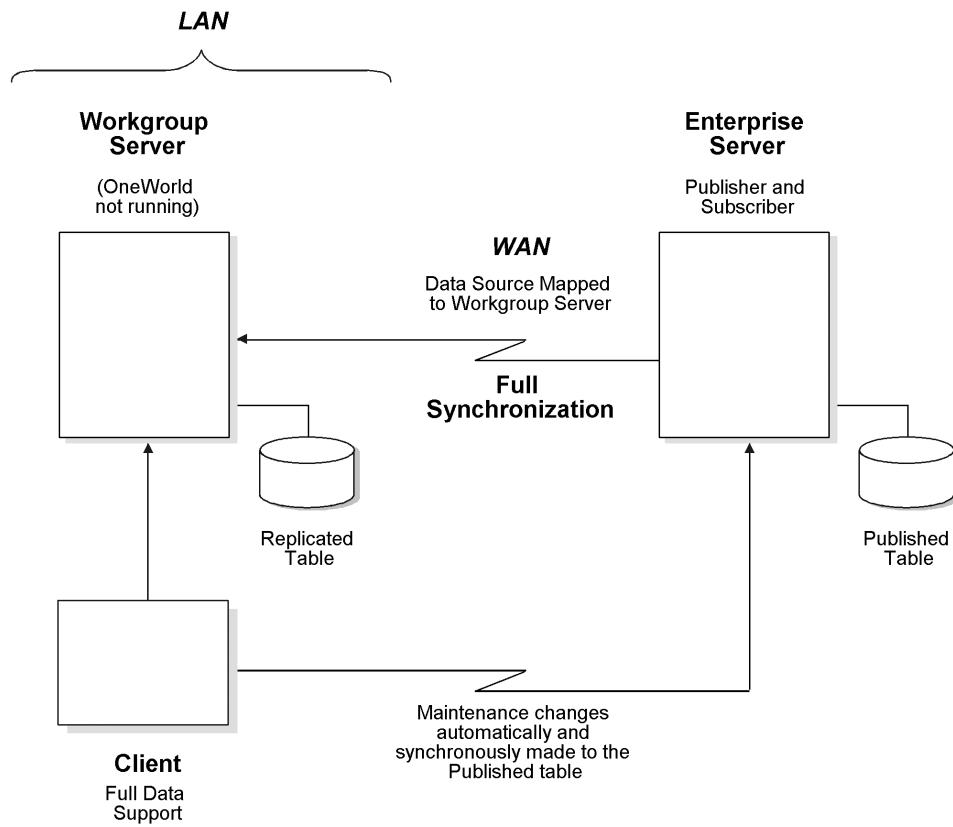
You cannot use a workgroup server when you use an AS/400 as the publisher server. When you replicate data across platforms from an AS/400, ERP 8.0 *must* reside on the workgroup server because JDBNet needs to run on the workgroup server for replication to occur successfully.

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 ERP 8.0 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 ERP 8.0, 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



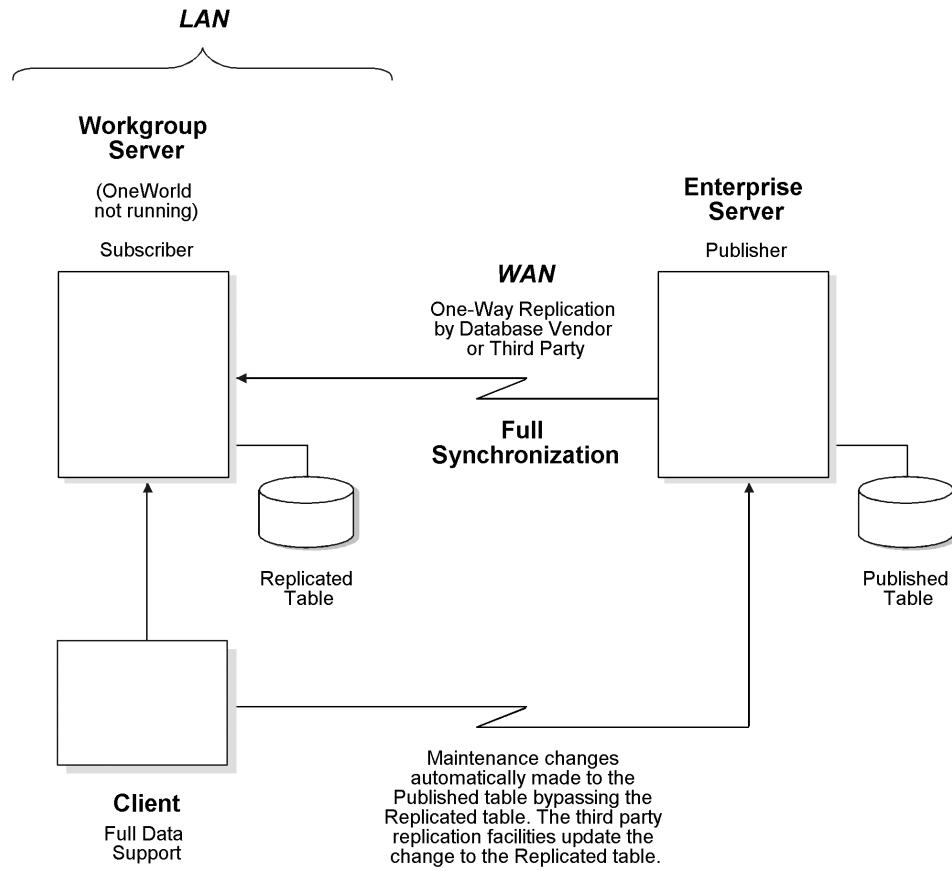
Third-Party Replication

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 ERP 8.0 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

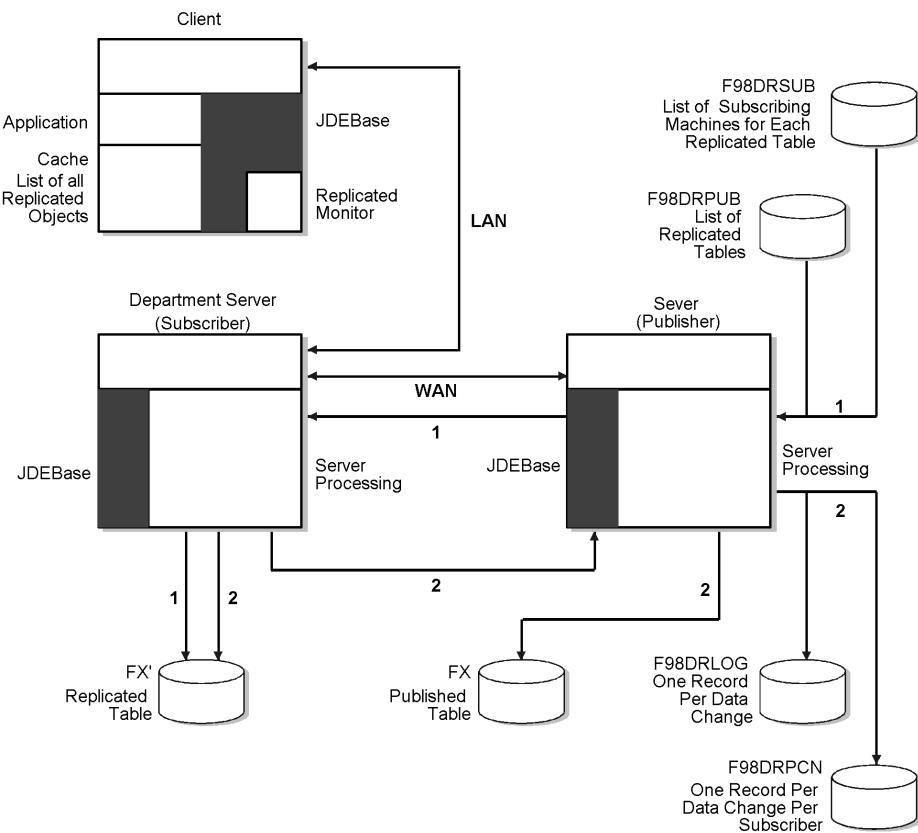


Workgroup Servers on a Wide Area Network

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 ERP 8.0 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. ERP 8.0 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 ERP 8.0 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 ERP 8.0 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.

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

You add or delete publishers using the Data Replication application (P98DREP), found on the System Administration Tools (GH9011) menu.

► 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).

Data Replication - [Work With Publishers]

This screenshot shows a software interface titled "Data Replication - [Work With Publishers]". The window has a menu bar with File, Edit, Preferences, Form, Row, Window, and Help. Below the menu is a toolbar with icons for Select, Find, Add, Copy, Del..., Close, Seg..., New..., Dis..., Abo, Links, Enabled..., OLE..., and Internet. The main area is a table with four columns: Publisher Host, Publisher Data Source, Object Name, and Enabled (Y/N). The data in the table is as follows:

Publisher Host	Publisher Data Source	Object Name	Enabled (Y/N)
DEVDBS10	devdbsp113	F0004	Y
DEVDBS10	devdbsp113	F0005	Y
JDEOW1	B733AS	FBLOB10	N
JDEOW1	JDFCTLB73	DDICT	Y
JDEOW1	JDFMNBDDEV	F0082	Y
JDEOW1	JDFMNBDDEV	F00821	Y
JDEOW1	JDFMNBDDEV	F0083	Y
JDEOW1	JDFMNBDDEV	F0084	Y
NTINTEL3	NTINTEL3 OWNTS3-1	F0004	Y
NTINTEL3	NTINTEL3 OWNTS3-1	F0005	Y

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

Data Replication - [Publisher Revisions]

This screenshot shows a software interface titled "Data Replication - [Publisher Revisions]". The window has a menu bar with File, Edit, Preferences, Window, and Help. Below the menu is a toolbar with OK, Cancel, Dis..., Abo, Links, Disp..., OLE..., and Internet. The main area is a form with fields for Host, Data Source, and Object Name. There is also a checked checkbox labeled "Enabled".

Host	<input type="text"/>
Data Source	<input type="text"/>
Object Name	<input type="text"/>
<input checked="" type="checkbox"/> Enabled	

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.

► **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

Working with the Data Replication application (P98DREP) on the System Administration Tools menu (GH9011), you can also add, synchronize, and delete 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.

Data Replication - [Work With Subscribers]

Subscriber	Data Source	Subscription Type	Enabled Y/N	Synchronized	Hold Changes
DEVDBS10	devdbsp113a	PSH	Y	Y	N
TQALAB7	Access32	PUL	Y	Y	

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

Data Replication - [Subscriber Revisions]

Publisher Host	DEVDBS10	<input checked="" type="checkbox"/> Enabled
Publisher Data Source	devdbsp113	<input type="checkbox"/> Synchronize
Object Name	F0004	User Defined Code Types
Subscriber Machine	[]	[]
Subscriber Data Source	[]	
Subscription Type	[]	

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.

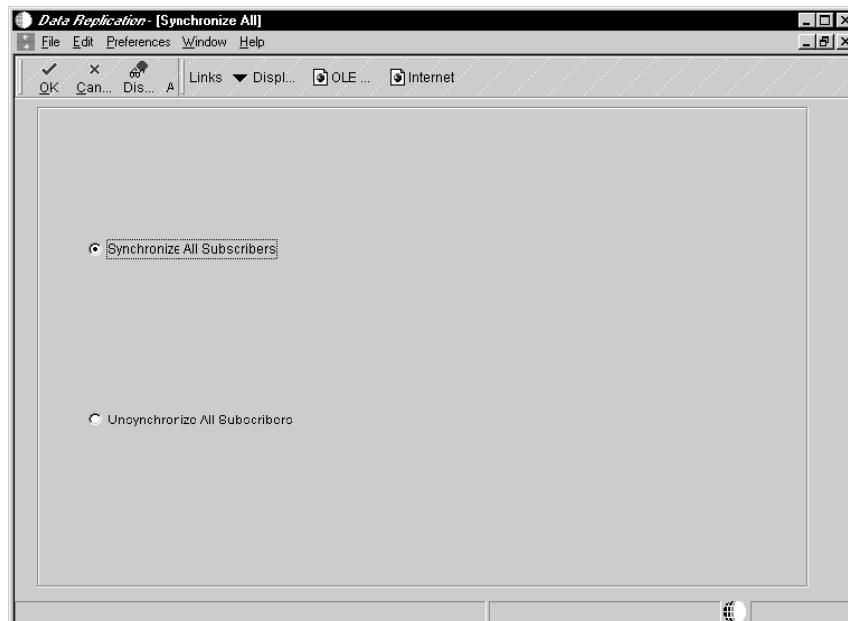
When you add a subscriber record, it is automatically set up as not synchronized.

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.

► 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 ERP 8.0 considers those subscribers to be in synch with their associated publisher.

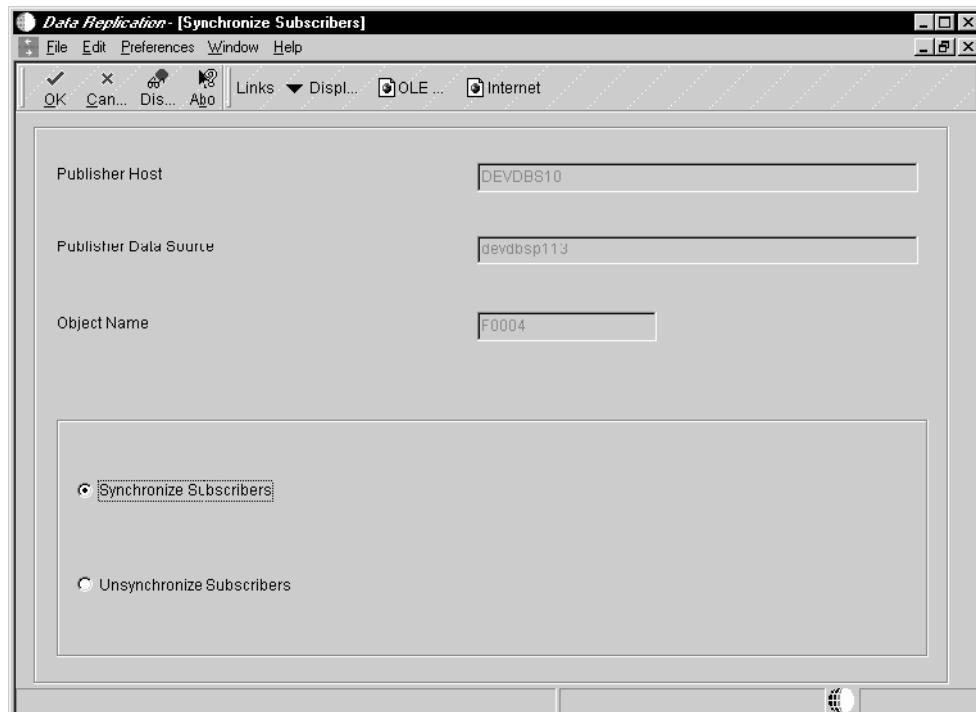
- Unsynchronize All Subscribers

The In Synch flag for all of the subscribers for all publishers changes to N, meaning that ERP 8.0 considers those subscribers to be out of synch with their associated publisher. The next time that a user signs on, ERP 8.0 tells the user that the table is out of synch. If the user chooses to synchronize the table, ERP 8.0 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 ERP 8.0 considers those subscribers to be in synch with their associated publisher.

- Unsynchronize Subscribers

The In Synch flag for all of the subscribers of the publisher that you chose changes to N, meaning that ERP 8.0 considers those subscribers to be *out of synch* with their publisher. The next time that a user signs on, ERP 8.0 will tell the user that the table is out of synch. If the user chooses to synchronize the table, ERP 8.0 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

Using the Data Replication application (P98DREP) on the System Administration Tools menu (GH9011), you can delete individual subscribers, or you can delete all 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.

ERP 8.0 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.

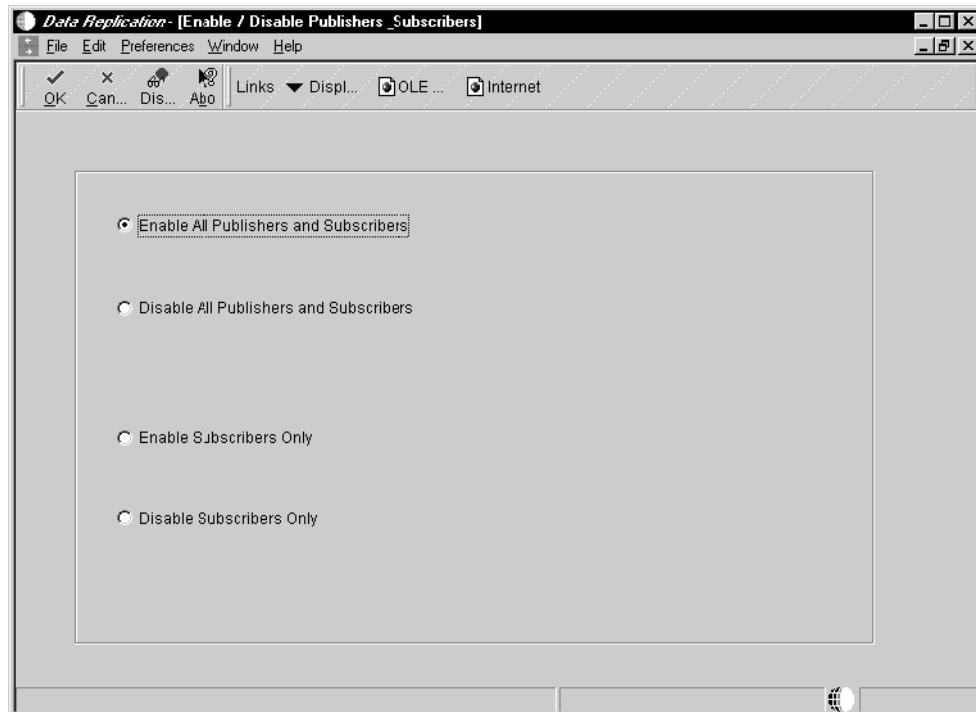
Enabling and Disabling Publishers and Subscribers

You can enable and disable data replication for publishers and subscribers.

► 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.

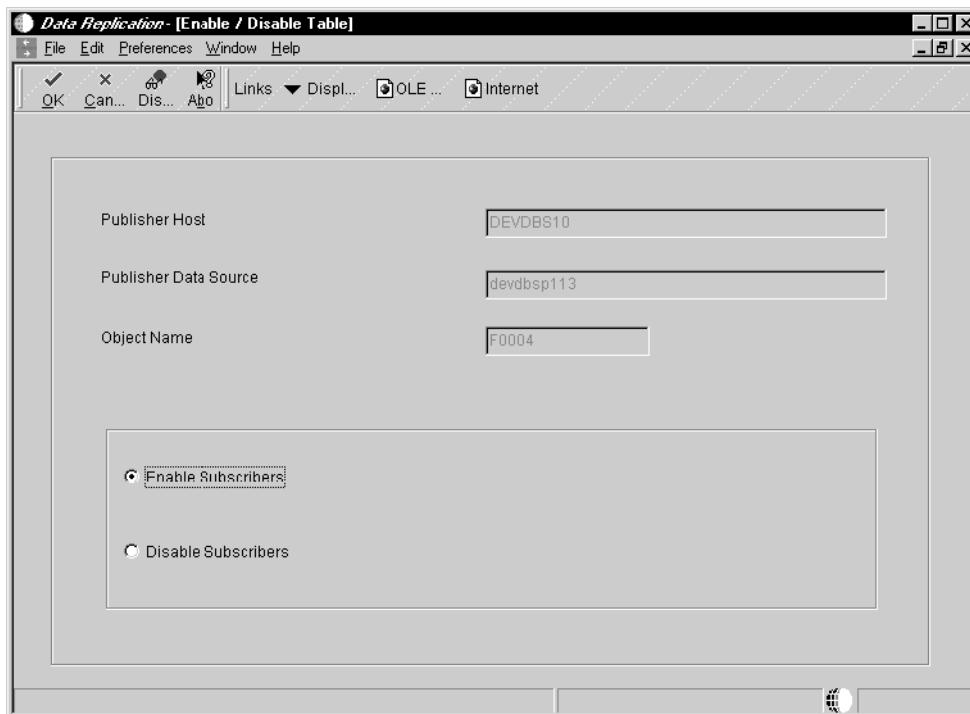


3. On the Enable / Disable Publishers & Subscribers form, choose one of the following and click OK:
 - Enable All Publishers and Subscribers
 - Disable All Publishers and Subscribers
 - Enable Subscribers Only
 - Disable Subscribers Only

► 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

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.

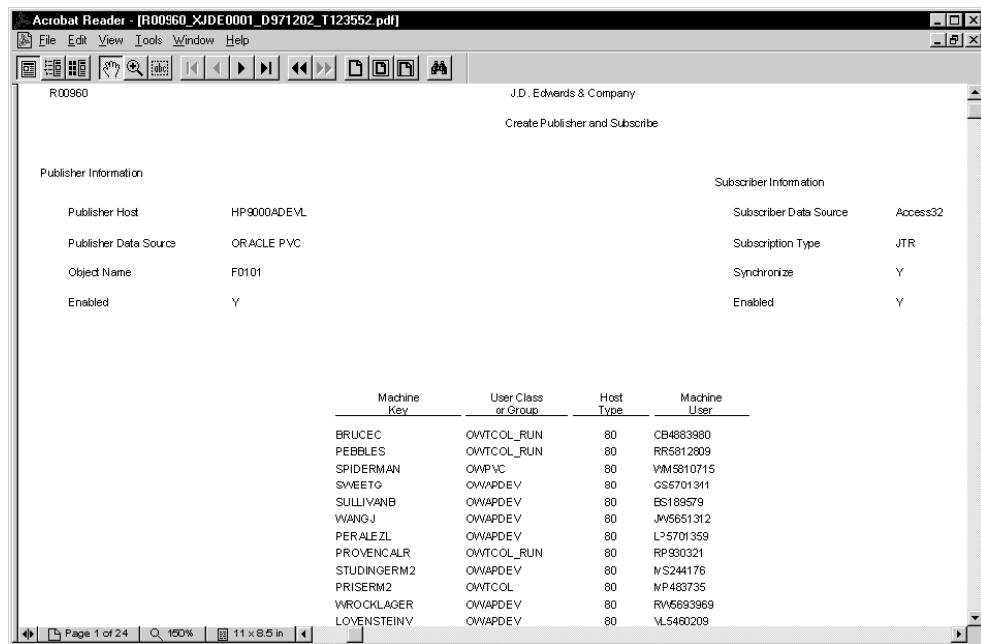
This batch process reads the Machine Identification (F00960) table, which stores information about each ERP 8.0 workstation. From information that you type into the processing option on how to create a publisher, you can create a publisher record and subscriber records for each workstation in the table. 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 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.

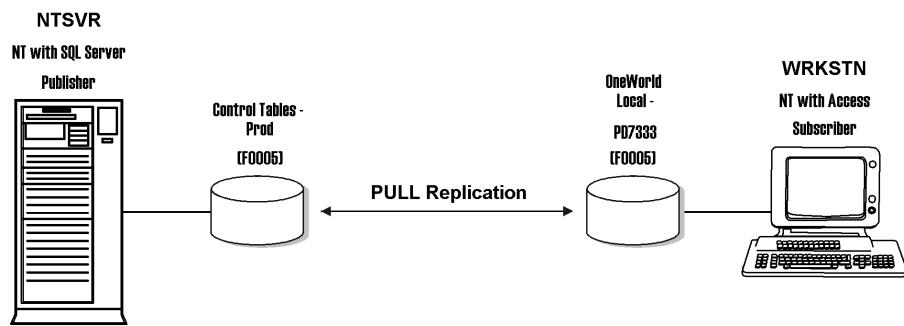
ERP 8.0 creates the new publisher and all of its associated subscribers.

Setting Up the Environment for Data Replication

Before using ERP 8.0 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).

Setting Up a One-Tier Replication Environment

This example uses simple one-tier PULL replication between a ERP 8.0 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 - B7334 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 - B7334 Server Map) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC

PD7334 F98DRENV System - B7334 *PUBLIC

- ❑ Environ: PD7334
Object: F98DRPUB

Data Source: System - B7334

User: *PUBLIC
- ❑ Environ: PD7334
Object: F98DRSUB

Data Source: System - B7334

User: *PUBLIC
- ❑ Environ: PD7334
Object: F98DRENV

Data Source: System - B7334

User: *PUBLIC

These mappings exist so that the publisher is able to locate the Publisher and Subscriber definitions and cache them when ERP 8.0 is started on this machine.

The System data source for the subscriber workstations (System B7334) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	❑ Environ: PD7334 Object: F98DRPUB Data Source: System - B7334 User: *PUBLIC		
	❑ Environ: PD7334 Object: F98DRSUB Data Source: System - B7334 User: *PUBLIC		
	❑ Environ: PD7334 Object: F98DRENV Data Source: System - B7334 User: *PUBLIC		

Data Source: System - B7334

User: *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 ERP 8.0 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 (NTSRV - B7334 Server Map) should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	NTSRV	System - B7334	SYS7334	JDBODBC.DLL
DB	Control Tables - Prod	NTSRV	Control Tables - Prod	PRODDTA	JDBODBC.DLL
□ Type: DB					
Data Source Name: System - B7334					
Server: NTSRV					
Database Name: System - B7334					
Owner: SYS7334					
DLL Name: JDBODBC.DLL					
□ Type: DB					
Data Source Name: Control Tables - Prod					
Server: NTSRV					
Database Name: Control Tables - Prod					
Owner: PRODDTA					
DLL Name: JDBODBC.DLL					

The data source for System - B7334 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 - B7334) should include the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	NTSVR	System - B7334	SYS7334	JDBODBC.DLL
SVR	NTSRV	NTSVR	NTSRV - B7334 Server Map	SVM7334	JDBODBC.DLL
DB	NTSVR - B7334 Server Map	NTSVR	NTSVR - B7334 Server Map	SVM7334	JDBODBC.DLL
DB	ERP 8.0 Local - PD7334	LOCAL	ERP 8.0 Local - PD7334		JDBODBC.DLL
□ Type: DB					
Data Source Name: System - B7334					
Server: NTSRV					
Database Name: System - B7334					
Owner: SYS7334					
DLL Name: JDBODBC.DLL					
□ Type: SVR					
Data Source Name: NTSRV					
Server: NTSRV					
Database Name: NTSRV - B7334 Server Map					
Owner: SVM7334					
DLL Name: JDBODBC.DLL					
□ Type: DB					
Data Source Name: NTSRV - B7334 Server Map					
Server: NTSRV					
Database Name: NTSRV - B7334 Server Map					
Owner: SVM7334					
DLL Name: JDBODBC.DLL					
□ Type: DB					
Data Source Name: ERP 8.0 Local - PD7334					
Server: LOCAL					
Database Name: ERP 8.0 Local - PD7334					
Owner:					
DLL Name: JDBODBC.DLL					

The data source for System - B7334 allows the subscriber machines to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for NTSVR and NTSVR - B7334 Server Map allows the subscriber machines to access the F98DRLOG and F98RPCN tables on the publisher machine. The data source for ERP 8.0 Local - PD7334 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:

Publishing Machine Published Data Source Object

NTSVR	Control Tables - Prod	F0005
<input type="checkbox"/> Publishing Machine: NTSRV		
Published Data Source: Control Tables - Prod		
Object: 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:

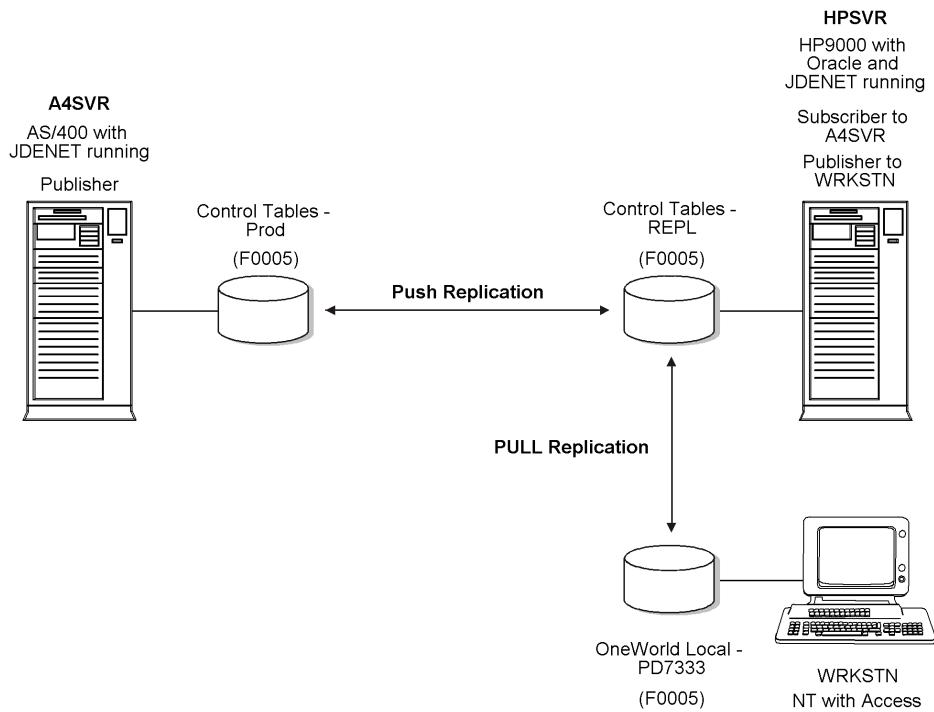
Subscriber Machine Subscriber Data Source Sub Type Sync Enabled Hold

WRKSTN	ERP 8.0 Local - PD7334	PUL	N	Y	N
<input type="checkbox"/> Subscriber Machine: WRKSTN					
Subscriber Data Source: ERP 8.0 Local - PD7334					
Sub Type: PUL					
Sync: N					
Enabled: Y					
Hold: 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 ERP 8.0 Local - PD7334 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 ERP 8.0 server (enterprise server) to another ERP 8.0 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 - B7334 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 - B7334 Server Map) should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	❑ Environ: PD7334		
	Object: F98DRPUB		
	Data Source: System - B7334		
	User: *PUBLIC		

- ❑ Environ: PD7334
Object: F98DRSUB
Data Source: System - B7334
User: *PUBLIC
- ❑ Environ: PD7334
Object: F98DRENV
Data Source: System - B7334
User: *PUBLIC

These mappings enable the publisher machine to locate the publisher and subscriber definitions and cache the definitions when ERP 8.0 begins to run on this machine.

The Server Map data source for the workgroup server (WGSVR - B7334 Server Map) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
❑ Environ: PD7334 Object: F98DRPUB Data Source: System - B7334 User: *PUBLIC			
❑ Environ: PD7334 Object: F98DRSUB Data Source: System - B7334 User: *PUBLIC			
❑ Environ: PD7334 Object: F98DRENV Data Source: System - B7334 User: *PUBLIC			

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the WGSVR publisher to locate the publisher and subscriber definitions and cache the definitions when ERP 8.0 begins to run on this machine.

The System data source for the subscriber workstations (System - B7334) should have the following ACTIVE mappings in the Object Configuration Master table (F986101):

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	<input type="checkbox"/> Environ: PD7334		
	Object: F98DRPUB		
		Data Source: System - B7334	
			User: *PUBLIC
	<input type="checkbox"/> Environ: PD7334		
	Object: F98DRSUB		
		Data Source: System - B7334	
			User: *PUBLIC
	<input type="checkbox"/> Environ: PD7334		
	Object: F98DRENV		
		Data Source: System - B7334	
			User: *PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the subscribers to locate the publisher and subscriber definitions and cache the definitions when ERP 8.0 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 - B7334 Server Map) should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	NTSVR	System - B7334	SYS7334	JDBODBC.DLL
DB	Control Tables - Prod	NTSVR	Control Tables - Prod	PRODDTA	JDBODBC.DLL
	<input type="checkbox"/> Type: DB				

Data Source Name: System - B7334

Server: NTSRV

Database Name: System - B7334

Owner: SYS7334

DLL Name: JDBODBC.DLL

- ❑ Type: DB

Data Source Name: Control Tables - Prod

Server: NTSRV

Database Name: Control Tables - Prod

Owner: PRODDTA

DLL Name: JDBODBC.DLL

The data source for System - B7334 allows the publisher machine (NTSRV) to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data source for Control Tables - Prod allows the NTSRV publisher machine to access the published table (F0005).

The Server Map data source for the workgroup server (WGSVR - B7334 Server Map) should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	NTSRV	System - B7334	SYS7334	JDBODBC.DLL
SVR	NTSRV	NTSRV	NTSRV - Server Map	SVM7334	JDBODBC.DLL
DB	NTSRV - Server Map	NTSRV	NTSRV - Server Map	SVM7334	JDBODBC.DLL
DB	Control Tables - REPL	WGSVR	Control Tables - REPL	PRODDTA	JDBODBC.DLL

- ❑ Type: DB

Data Source Name: System - B7334

Server: NTSRV

Database Name: System - B7334

Owner: SYS7334

DLL Name: JDBODBC.DLL

- ❑ Type: SVR

Data Source Name: NTSRV

Server: NTSRV

Database Name: NTSRV - Server Map

Owner: SVM7334

DLL Name: JDBODBC.DLL

- Type: DB

Data Source Name: NTSRV - Server Map

Server: NTSRV

Database Name: NTSRV - Server Map

Owner: SVM7334

DLL Name: JDBODBC.DLL

- Type: DB

Data Source Name: Control Tables - REPL

Server: WGSRV

Database Name: Control Tables - REPL

Owner: PRODDTA

DLL Name: JDBODBC.DLL

The data source for System - B7334 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 - B7334) should include the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	NTSVR	System - B7334	SYSB7334	JDBODBC.DLL
SVR	WGSVR	WGSVR	WGSVR - B7334 Server Map	SVM7334	JDBODBC.DLL
DB	WGSVR - B7334 Server Map	WGSVR	WGSVR - B7334 Server Map	SVM7334	JDBODBC.DLL
DB	ERP 8.0 Local - PD7334	LOCAL	ERP 8.0 Local - PD7334		JDBODBC.DLL

- Type: DB

Data Source Name: System - B7334

Server: NTSRV

Database Name: System - B7334

Owner: SYS7334

DLL Name: JDBODBC.DLL

- ❑ Type: SVR
 - Data Source Name: WGSRV
 - Server: WGSRV
 - Database Name: WGSRV - B7334 Server Map
 - Owner: SVM7334
 - DLL Name: JDBODBC.DLL

- ❑ Type: DB
 - Data Source Name: WGSRV - B7334 Server Map
 - Server: WGSRV
 - Database Name: WGSRV - B7334 Server Map
 - Owner: SVM7334
 - DLL Name: JDBODBC.DLL

- ❑ Type: DB
 - Data Source Name: ERP 8.0 Local - PD7334
 - Server: LOCAL
 - Database Name: ERP 8.0 Local - PD7334
 - Owner:
 - DLL Name: JDBODBC.DLL

The data source for System - B7334 allows the subscriber machines to access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for WGSVR and WGSVR - B7334 Server Map are required in order to access the F98DRLOG and F98DRPCN tables on the publisher machine (WGSVR). The data source for ERP 8.0 Local - PD7334 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:

Publishing Machine Published Data Source Object

NTSVR	Control Tables - Prod	F0005
WGSVR	Control Tables - REPL	F0005
❑ Publishing Machine: NTSVR		
Published Data Source: Control Tables - Prod		
Object: F0005		

- Publishing Machine: WGSVR
Published Data Source: Control Tables - REPL
Object: 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
-------	-----------------------	-----	---	---	---

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

Subscriber Machine	Subscriber Data Source	Sub Type	Sync	Enabled	Hold
--------------------	------------------------	----------	------	---------	------

WRKSTN	ERP 8.0 Local - PD7334	PUL	N	Y	N
--------	------------------------	-----	---	---	---

- Subscriber Machine: WKSTN
Subscriber Data Source: ERP 8.0 Local - PD7334
Sub Type: PUL
Sync: N
Enabled: Y
Hold: 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 ERP 8.0 Local - PD7334 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.

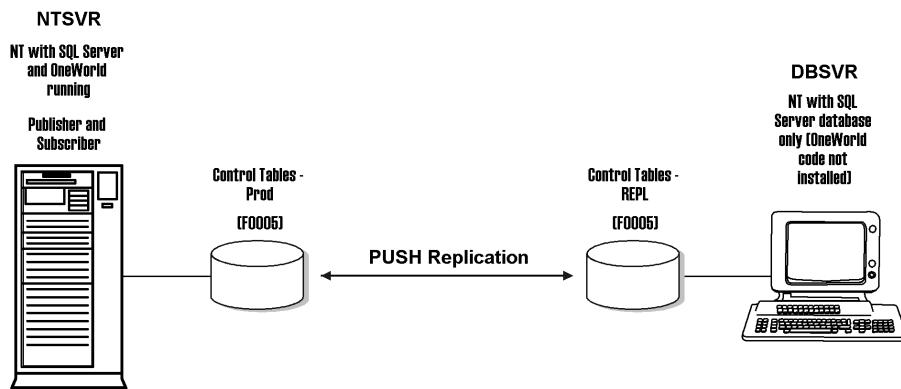
Setting Up Replication to a Non-ERP 8.0 Workgroup Server

The third example configures push replication from a ERP 8.0 enterprise server to a non-ERP 8.0 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. ERP 8.0 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 - B7334 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 - B7334 Server Map) for the publisher machine should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
<input type="checkbox"/> Environment: PD7334			

Object: F98DRPUB

Data Source: System - B7334

User: *PUBLIC

- Environment: PD7334

Object: F98DRSUB

Data Source: System - B7334

User: *PUBLIC

- Environment: PD7334

Object: F98DRENV

Data Source: System - B7334

User: *PUBLIC

These mappings enable the publisher machine to locate the publisher and subscriber definitions, and cache the definitions when ERP 8.0 begins to run on this machine.

The OCM mappings required by workstations are stored in the System - B7334 data source, and should have the following ACTIVE mappings.

The System data source (System - B7334) for the subscriber workstations should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	<input type="checkbox"/> Environment: PD7334		
	Object: F98DRPUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	<input type="checkbox"/> Environment: PD7334		
	Object: F98DRSUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	<input type="checkbox"/> Environment: PD7334		
	Object: F98DRENV		

Data Source: System - B7334

User: *PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the subscribers to locate the publisher and subscriber definitions, and cache the definitions when ERP 8.0 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 - B7334 Server Map) for the publisher machine should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	NTSVR	System - B7334	SYS7334	JDBODBC.DLL
DB	Control Tables - Prod	NTSVR	Control Tables - Prod	PRODDTA	JDBODBC.DLL
DB	Control Tables - REPL	NTSVR	Control Tables - REPL	REPLDTA	JDBODBC.DLL
<input type="checkbox"/> Type: DB Data Source Name: System - B7334 Server: NTSVR Database Name: System - B7334 Owner: SYS7334 DLL Name: JDBODBC.DLL					
<input type="checkbox"/> Type: DB Data Source Name: Control Tables - Prod Server: NTSVR Database Name: Control Tables - Prod Owner: PRODDTA DLL Name: JDBODBC.DLL					
<input type="checkbox"/> Type: DB Data Source Name: Control Tables - REPL Server: NTSVR Database Name: Control Tables - REPL					

Owner: REPLDTA

DLL Name: JDBODBC.DLL

The data source for System - B7334 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. ERP 8.0 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:

Publishing Machine Published Data Source Object

NTSVR	Control Tables - Prod	F0005
<input type="checkbox"/> Publishing Machine: NTSVR		
Published Data Source: Control Tables - Prod		
Object: 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

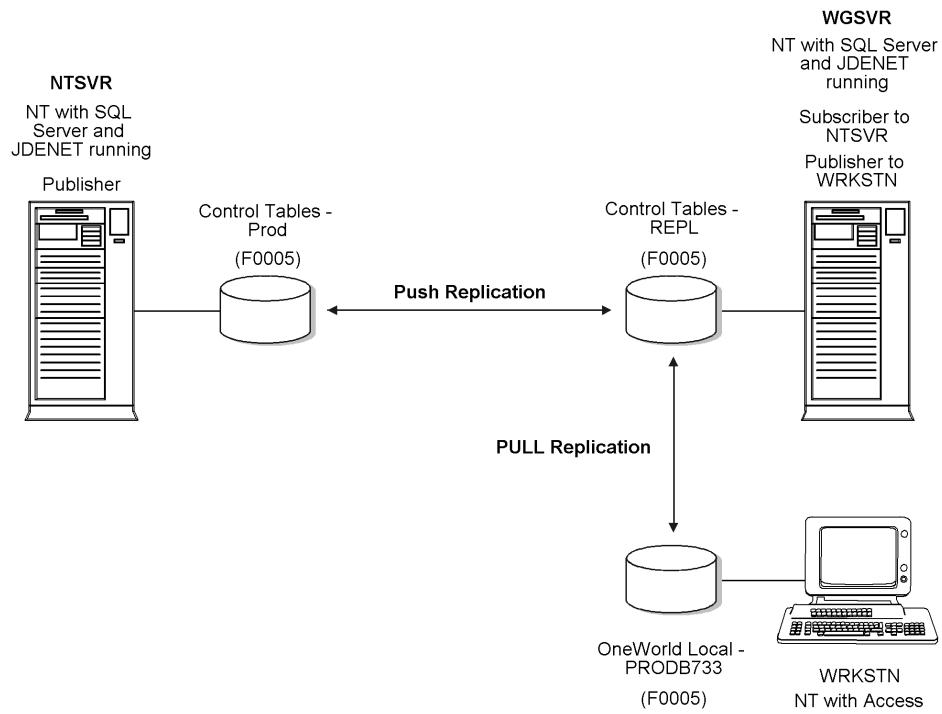
NTSVR	Control Tables - REPL	PSH	Y	Y	N
<input type="checkbox"/> Subscriber Machine: NTSVR					
Subscriber Data Source: Control Tables - REPL					
Sub Type: PSH					
Sync: Y					
Enabled: Y					
Hold: N					

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 ERP 8.0; 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 ERP 8.0 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 - B7334 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 - B7334 Server Map) for the AS/400 should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	□ Environment: PD7334		
	Object: F98DRPUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	□ Environment: PD7334		
	Object: F98DRSUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	□ Environment: PD7334		
	Object: F98DRENV		
		Data Source: System - B7334	
		User: *PUBLIC	

These mappings enable the publisher machine to locate the publisher and subscriber definitions, and cache the definitions when ERP 8.0 begins to run on this machine.

The Server Map data source (HPSVR - B7334 Server Map) for the HP9000 should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	□ Environment: PD7334		
	Object: F98DRPUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	□ Environment: PD7334		

Object: F98DRSUB

Data Source: System - B7334

User: *PUBLIC

- Environment: PD7334

Object: F98DRENV

Data Source: System - B7334

User: *PUBLIC

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the publisher machine to locate the publisher and subscriber definitions, and cache the definitions when ERP 8.0 begins to run on this machine.

The System data source (System - B7334) for the subscriber workstations should have the following ACTIVE mappings in the Object Configuration Master (F986101) table:

Environment	Object	Data Source	User
PD7334	F98DRPUB	System - B7334	*PUBLIC
PD7334	F98DRSUB	System - B7334	*PUBLIC
PD7334	F98DRENV	System - B7334	*PUBLIC
	<input type="checkbox"/> Environment: PD7334		
	Object: F98DRPUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	<input type="checkbox"/> Environment: PD7334		
	Object: F98DRSUB		
		Data Source: System - B7334	
		User: *PUBLIC	
	<input type="checkbox"/> Environment: PD7334		
	Object: F98DRENV		
		Data Source: System - B7334	
		User: *PUBLIC	

The mappings for F98DRPUB, F98DRSUB, and F98DRENV enable the subscribers to locate the publisher and subscriber definitions, and cache the definitions when ERP 8.0 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 - B7334 Server Map) for the AS/400 should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	A4SVR	System - B7334	SYS7334	DBDR
DB	Control Tables - Prod	A4SVR	Control Tables - Prod	PRODDTA	DBDR
	<input type="checkbox"/> Type: DB				
			Data Source Name: System - B7334		
				Server: A4SVR	
					Database Name: System - B7334
					Owner: SYS7334
					DLL Name: DBDR
	<input type="checkbox"/> Type: DB				
			Data Source Name: Control Tables - Prod		
				Server: A4SVR	
					Database Name: Control Tables - Prod
					Owner: PRODDTA
					DLL Name: DBDR

The data source for System - B7334 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 - B7334 Server Map) for the HP9000 should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	A4SVR	System - B7334	SYS7334	LIBJDBNET.SL
SVR	A4SVR		A4SVR - Server Map	SVM7334	LIBJDBNET.SL
DB	A4SVR - Server Map	A4SVR	A4SVR - Server Map	SVM7334	LIBJDBNET.SL
DB	Control Tables - REPL	HPSVR	Control Tables - REPL	PRODDTA	LIBORA80.SL

- ❑ Type: DB
Data Source Name: System - B7334
Server: A4SVR
Database Name: System - B7334
Owner: SYS7334
DLL Name: LIBJDBNET.SL
- ❑ Type: SVR
Data Source Name: A4SVR
Server: A4SVR
Database Name: A4SVR - Server Map
Owner: SVM7334
DLL Name: LIBJDBNET.SL
- ❑ Type: DB
Data Source Name: A4SVR - Server Map
Server: A4SVR
Database Name: A4SVR - Server Map
Owner: SVM7334
DLL Name: LIBJDBNET.SL
- ❑ Type: DB
Data Source Name: Control Tables - REPL
Server: HPSVR
Database Name: Control Tables - REPL
Owner: PRODDTA
DLL Name: LIBORA80.SL

The data source for System - B7334 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 - B7334) for the subscriber workstations should have the following data source definitions in the Data Source Master table (F98611):

Type	Data Source Name	Server	Database Name	Owner	DLL Name
DB	System - B7334	A4SVR	System - B7334		JDBODBC.DLL
SVR	HPSVR		HPSVR HPSVR - B7334 Server Map	SVM7334	JDBOCI80.DLL
DB	HPSVR - B7334 Server Map	HPSVR	HPSVR - B7334 Server Map	SVM7334	JDBOCI80.DLL
DB	ERP 8.0 Local - PD7334	LOCAL	ERP 8.0 Local - PD7334		JDBODBC.DLL
□ Type: DB					
Data Source Name: System - B7334					
Server: A4SVR					
Database Name: System - B7334					
Owner:					
DLL Name: JDBODBC.DLL					
□ Type: SVR					
Data Source Name: HPSVR					
Server: HPSVR					
Database Name: HPSVR - B7334 Server Map					
Owner: SVM7334					
DLL Name: JDBOCI80.DLL					
□ Type: DB					
Data Source Name: HPSVR - B7334 Server Map					
Server: HPSVR					
Database Name: HPSVR - B7334 Server Map					
Owner: SVM7334					
DLL Name: JDBOCI80.DLL					
□ Type: DB					
Data Source Name: ERP 8.0 Local - PD7334					
Server: HPSVR					
Database Name: ERP 8.0 Local - PD7334					
Owner:					
DLL Name: JDBODBC.DLL					

The data source for System - B7334 is how the subscriber machines access the F98DRPUB, F98DRSUB, and F98DRENV tables. The data sources for HPSVR and HPSVR - B7334 Server Map are needed to access the F98DRLOG and F98DRPCN tables on the publisher machine (HPSVR). The data source for ERP 8.0 Local - PD7334 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:

Publishing Machine Published Data Source Object

A4SVR	Control Tables - Prod	F0005
HPSVR	Control Tables - REPL	F0005
□ Publishing Machine: A4SVR		
Published Data Source: Control Tables - Prod		
Object: F0005		
□ Publishing Machine: HPSVR		
Published Data Source: Control Tables - REPL		
Object: 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
□ Subscriber Machine: HPSVR					
Subscriber Data Source: Control Tables - REPL					
Sub Type: PSH					
Sync: Y					
Enabled: Y					
Hold: 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	ERP 8.0 Local - PD7334	PUL	N	Y	N
--------	------------------------	-----	---	---	---

- ❑ Subscriber Machine: WRKSTN
- Subscriber Data Source: ERP 8.0 Local - PD7334
- Sub Type: PUL
- Sync: N
- Enabled: Y
- Hold: 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 ERP 8.0 Local - PD7334 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.

► To modify the workstation jde.ini files

For all workstations that have ERP 8.0 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:
 \\B7334\\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 on/off
```

```
[ SECURITY ]  
User=user ID  
Password=database password  
DefaultEnvironment=default environment name  
[ DEBUG ]  
RepTrace=replication trace 1 or 0 (for ON/OFF)
```

Variable	Description
<i>user ID</i>	The database ID that has access to the replication files (F98DRPUB, F98DRSUB, F98DRENV).
<i>database password</i>	The database password that has access to the replication files (F98DRPUB, F98DRSUB, F98DRENV).
<i>default environment name</i>	Any valid environment for the path code in which the publisher resides.
<i>replication trace 0/1 (off/on)</i>	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 DV7334 and PD7334 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 ERP 8.0 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 DV7334 and PD7334 path codes, you should set up data dictionary replication only for the PD7334 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 jde.ini file.
2. Using an ASCII editor, set the value for the following setting to 1:

```
[REPLICATION]
```

```
ForcedSync=forced synchronization 0/1 (off/on)
```

The next time that you sign on to ERP 8.0 on the machine, ERP 8.0 performs a forced synchronization of all replicated tables. After the forced synchronization, ERP 8.0 automatically turns off the setting.

Note:

If the [REPLICATION] section does not contain the ForcedSync setting, ERP 8.0 performs a forced synchronization, and then automatically writes ForcedSync=0 into the [REPLICATION] section.

Variable	Description
<i>forced synchronization 0/1 (off/on)</i>	You can set a machine to perform a forced synchronization of replicated tables. When you force synchronization, ERP 8.0 copies all replicated tables from the publisher to the subscriber when you sign on to ERP 8.0 on the machine. The valid values are: <ul style="list-style-type: none">• 0=off• 1=on

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

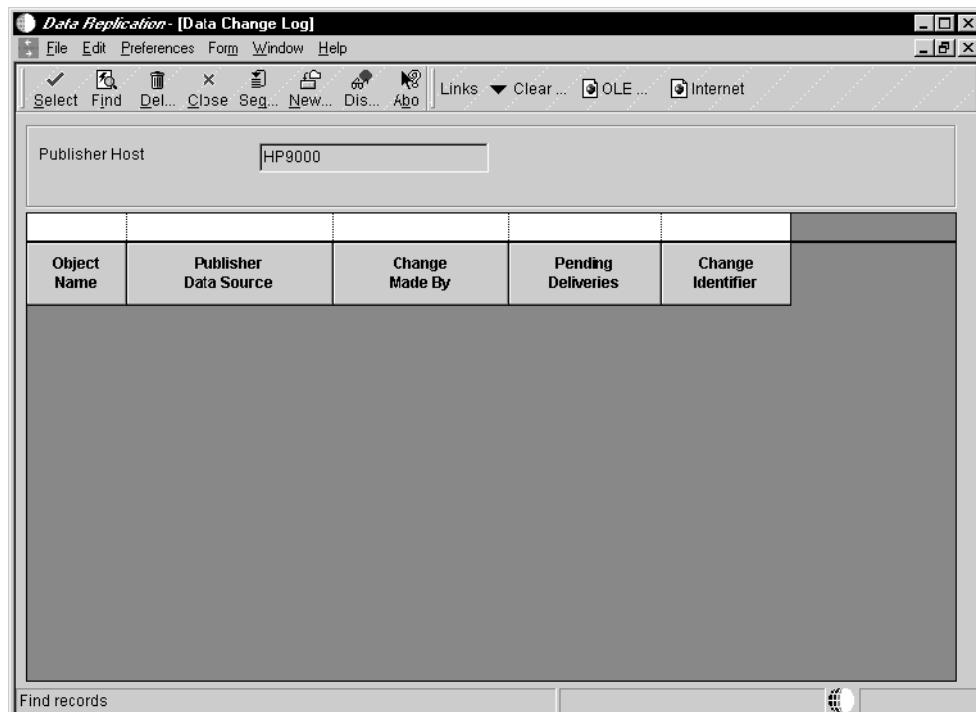
Viewing Outstanding Changes for a Given Host

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.

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 ERP 8.0 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. ERP 8.0 replicates these changes to subscribers the next time the machine that made the changes signs onto ERP 8.0.

► **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.

The screenshot shows a Windows application window titled "Data Replication - [Attempted Messages]". The window has a menu bar with File, Edit, Preferences, Window, and Help. Below the menu is a toolbar with icons for Select, Find, Del..., Close, Seg..., New..., Disp..., Abo, Links, OLE..., and Internet. The main area is a grid table with the following columns: Publisher Host, Object Name, Subscriber Data Source, Change Made By, and Pending Deliveries. The data in the grid is as follows:

Publisher Host	Object Name	Subscriber Data Source	Change Made By	Pending Deliveries
JDED	FBLOB09	AS2A	GDM	0
JDED	FBLOB09	AS2A	GDM	0
JDED	FBLOB09	AS2A	GDM	0
JDED	F0004	PS1A	GDM	0
JDED	F0004	PS1A	GDM	0
JDED	F0004	PS1A	GDM	0
JDED	F0004	AS1A	GDM	0
JDED	F0004	AS1A	GDM	0
JDED	F0004D	AS1A	GDM	0
JDED	F0004	AS1A	GDM	0
JDED	F0004D	AS1A	GDM	0
JDEOW1	DDDICT	JOHNSONJ		1135
JDEOW1	DDDICT	JOHNSONJ		1135
JDEOW1	DDDICT	JOHNSONJ		1135
JDEOW1	DDDICT	JOHNSONJ		1135
JDEOW1	DDDICT	JOHNSONJ		1135

ERP 8.0 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.

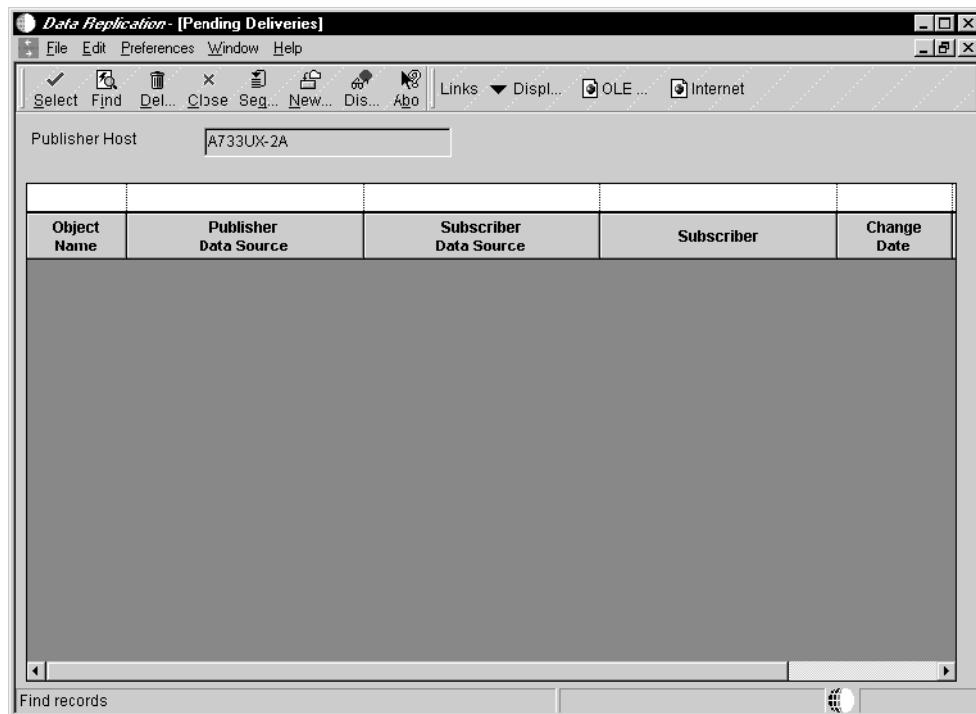
Viewing Pull Subscribers Who Have Not Retrieved Their Changes

This log allows you to view pull subscribers that have not signed onto ERP 8.0 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 ERP 8.0 relational database (RDB) tables (F92*). Regardless of whether you activate data replication through the Data Replication application (P98DREP), the ERP 8.0 replication engine automatically builds a copy of data dictionary items in the ERP 8.0 Table Access Management (TAM) format on every ERP 8.0 workstation in the enterprise. This setup enhances performance when a table or application accesses the data dictionary.

Initially, ERP 8.0 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

By default, ERP 8.0 only loads data dictionary items into the local TAM files the first time that a ERP 8.0 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.

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 ERP 8.0 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\path\code name\spec

The next time you log on to ERP 8.0 from that workstation, ERP 8.0 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 ERP 8.0, ERP 8.0 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, ERP 8.0 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, ERP 8.0 *must* reside on the workgroup server because JDBCNet 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, ERP 8.0 requires still less network traffic to retrieve data.

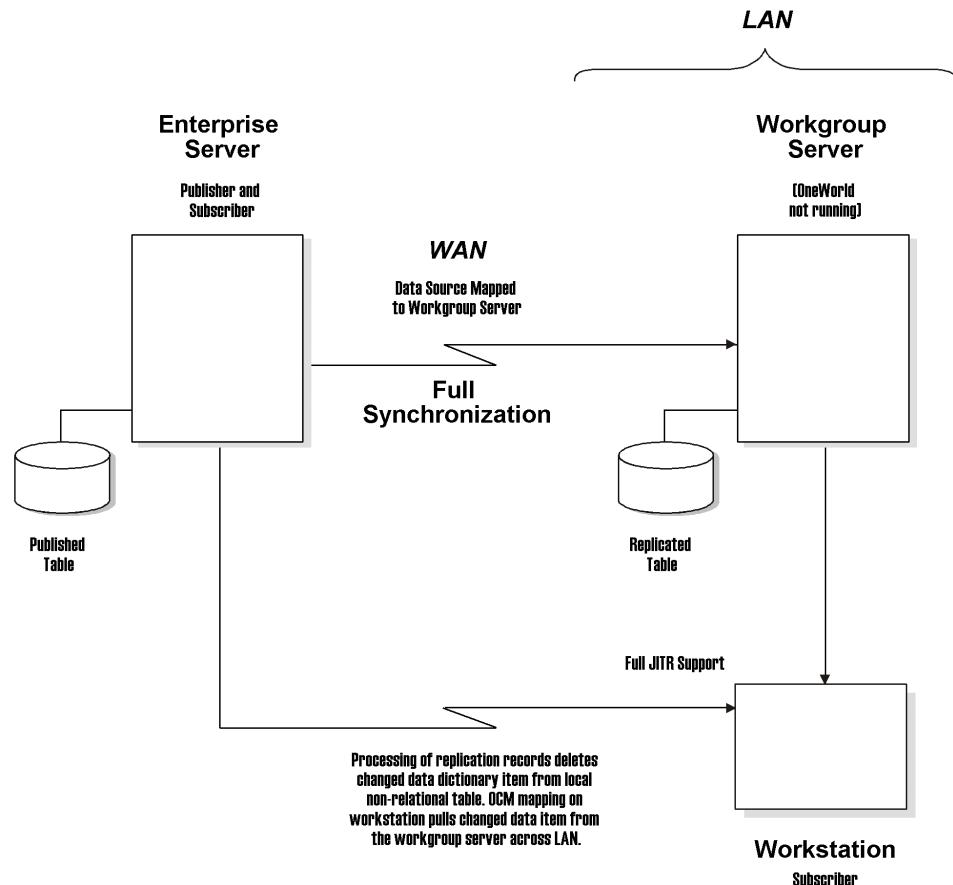
You can also set up a workgroup server as a database-only workgroup server to support your data replication strategy. A database-only workgroup server does not run any ERP 8.0 server code. To set up a workgroup server, use the following steps:

► **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, ERP 8.0 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.

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 ERP 8.0 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 ERP 8.0 requests a description of data item. Similar to F9202.
F9207	Data Dictionary – Error Message Information	One record per error message.
F9210	Data Field Specifications (ERP 8.0)	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.

□ **Table: F9200**

Description: Data Item Master

Purpose: Relational breakdown of data dictionary.

□ **Table: F9202**

Description: Data Field Display Text

Purpose: Contains display text for each data field for language, data item, and system code reporting. Used when a user or ERP 8.0 requests a description of a data item.

Table: F9203

Description: Data Item Alpha Descriptions

Purpose: Contains easily searchable descriptions and compressed descriptions of data items. Used when a user or ERP 8.0 requests a description of a data item. Similar to F9202.

Table: F9207

Description: Data Dictionary - Error Message Information

Purpose: One record per error message.

Table: F9210

Description: Data Field Specifications (ERP 8.0)

Purpose: Contains detailed information (specifications) for each data item. Accessed whenever a data item needs to be identified.

Table: F9211

Description: Data Dictionary - Smart Fields

Purpose: 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

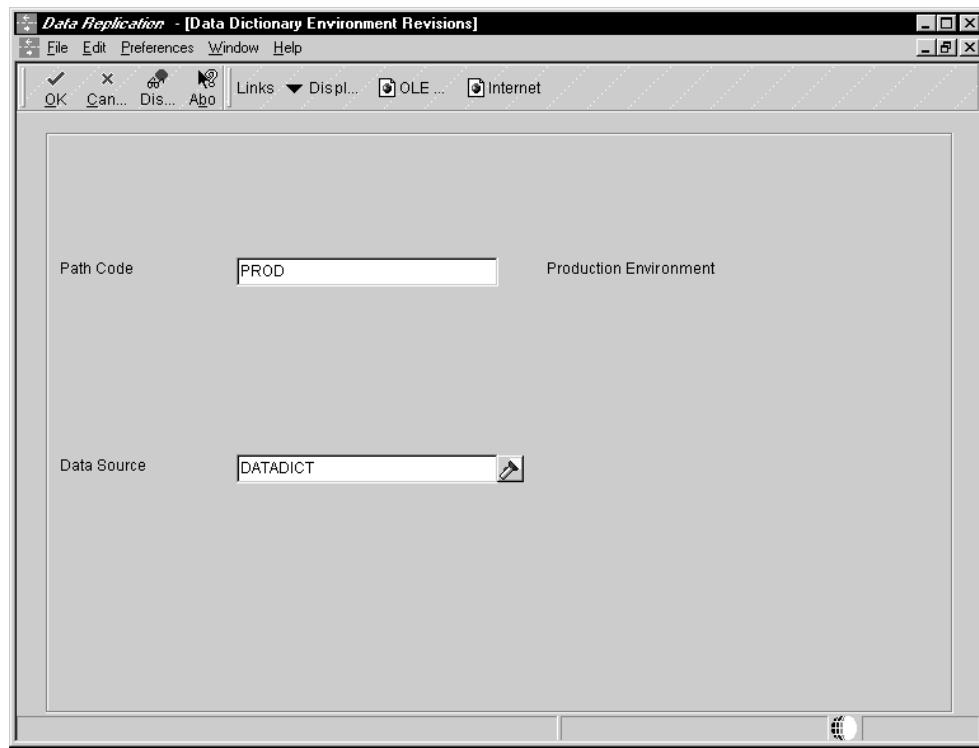
When you set up data dictionary replication, you need to set up pointers that the publisher can follow to determine the data dictionary specification tables on a workstation. These pointers provide the path code that the publisher uses to locate the specification tables.

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.

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.

► 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 ERP 8.0.

► 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 **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**.

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 ERP 8.0 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 enterprise server.

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

ERP 8.0 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, DV7334\spec.

Processing Options: R92TAM

Process

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

For information about a processing option, right-click the processing option field and choose What's This from the menu. Or, click the processing option field and press F1.

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

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 ERP 8.0 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 ERP 8.0 enterprise. Data dictionary administrators should be experienced with ERP 8.0 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 ERP 8.0, 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 ERP 8.0 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 ERP 8.0 data dictionaries.

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

Before You Begin

- ❑ Ensure that you are familiar with the concepts in the *Data Dictionary* in the *Tools Guide*. This section describes using the data dictionary and defining a data term.

Understanding Data Dictionary Replication

In a typical ERP 8.0 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 ERP 8.0 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 (JIT) 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. ERP 8.0 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)

ERP 8.0 supports a just-in-time data dictionary. When a user accesses an application for the first time, ERP 8.0 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.

ERP 8.0 replicates data dictionary information from the relational data dictionary to the workstation's specification tables. Anytime that ERP 8.0 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 ERP 8.0, 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, ERP 8.0 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.

Replicating Data Dictionary Changes to Workstations

ERP 8.0 stores data dictionary items in cache on each workstation. You can replicate changed data items to workstations using the Data Replication (P98DREP) application.

Before You Begin

- Familiarize yourself with the principles of data replication as explained in the *Data Replication* section in this guide.

Concepts of Replicating Data Dictionary Changes to Workstations

ERP 8.0 stores data dictionary information on each workstation in a permanent cache under the local \path code\spec directory as gltbl.xdb and gltbl.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 ERP 8.0, it pulls a replication message that tells it which item has changed. As a result, ERP 8.0 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, ERP 8.0 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 ERP 8.0 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:

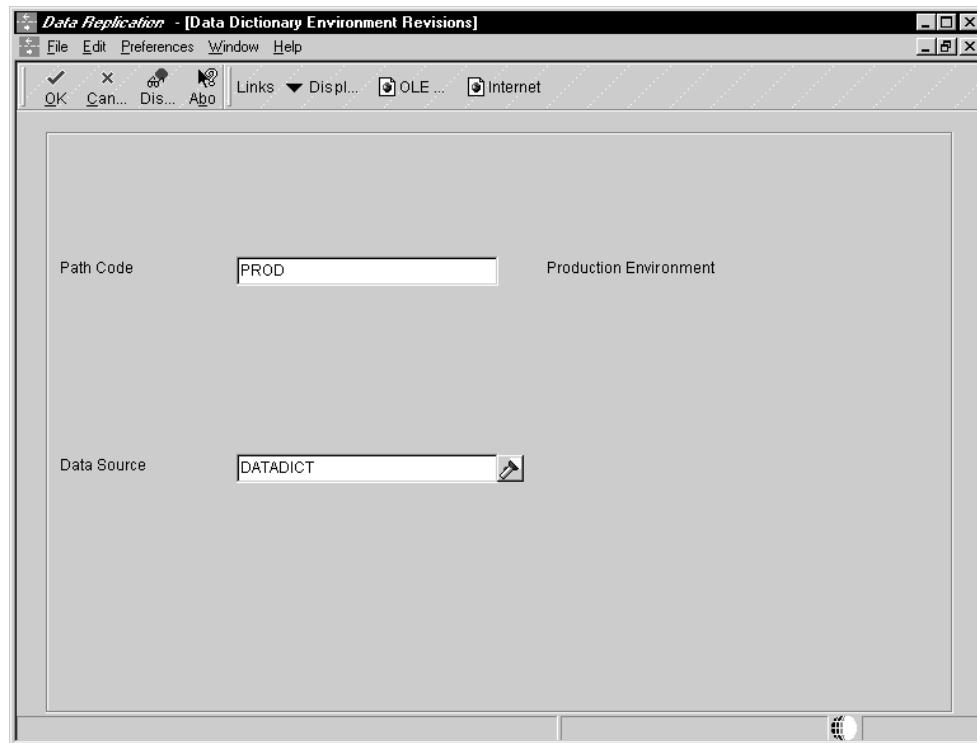
- Add only one publisher record for workstation data dictionary replication, using the object name DDDICT. This object name represents all of the data dictionary files.
- Set up one subscriber record for each machine to which you want to replicate the data dictionary.

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

1. 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. ERP 8.0 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

You have the choice of replicating only the changed items or replicating all changes, including deleted items.

Before You Begin

- Before continuing with this topic, become familiar with the principles of data replication, as explained in the *Data Replication* section.

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 ERP 8.0 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  
ddindex.ddb  
ddindex.xdb  
pathcode name  
spec  
dddict.ddb [old tables]  
dddict.xdb  
ddtext.ddb  
ddtext.xdb  
ddindex.ddb  
ddindex.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 DV7334 and PD7334 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 ERP 8.0 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 DV7334 and PD7334 path codes, you should set up data dictionary replication only for the PD7334 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 ERP 8.0 Data Dictionaries

This topic only applies to customers with coexisting WorldSoftware and ERP 8.0 installations.

You must separately maintain the ERP 8.0 data dictionary and the WorldSoftware data dictionary. This means that any changes that you make to the ERP 8.0 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 ERP 8.0 data dictionary, as follows:

- If an item is in the WorldSoftware data dictionary but not in ERP 8.0, this process adds it to ERP 8.0.
- If an item is in ERP 8.0 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 ERP 8.0 data dictionary.
- The process replaces the glossary information, row headings, and column headings in ERP 8.0 with that information from WorldSoftware.
- Item specifications that both WorldSoftware and ERP 8.0 use, such as data item size, system code, or decimal places, are overwritten in ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0
- Items in ERP 8.0 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 ERP 8.0 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.

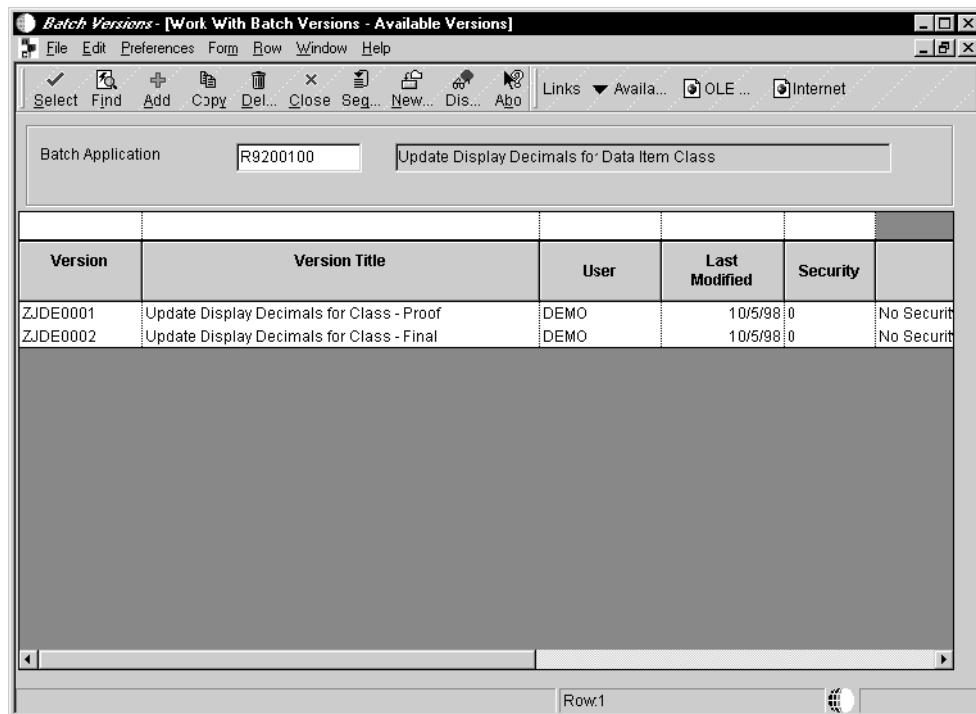
As with any data dictionary change, when you update display decimals, your replication method (batch or workstation) will replicate the changes throughout your enterprise.

Before You Begin

- Turn off data replication by disabling the publishers or by turning off replication for the DDDICT and F92* tables. Otherwise, ERP 8.0 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"

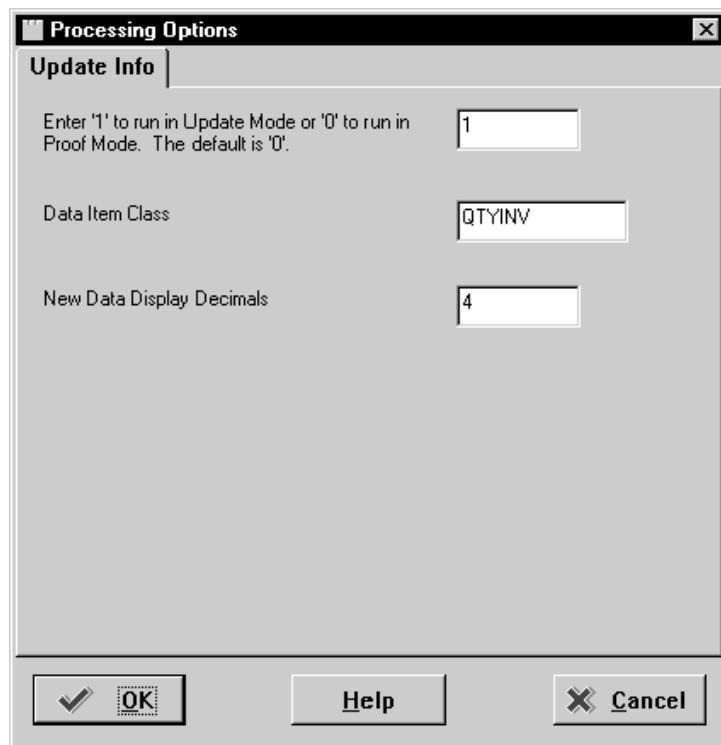
Important:

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 ERP 8.0. Also, if you modify which data items reside in the QTYINV data item class, you must research and test how the modifications impact ERP 8.0.

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:

Update Info

Enter '1' to run in Update Mode or '0' to run in Proof Mode. The default is '0'.

Data Item Class

New Data Display Decimals

- 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 following spec files:

qltbltbl.ddb, qltbltbl.xdb
dddict.ddb, dddict.xdb
ddtext.ddb, ddtext.xdb

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.

Object Management Workbench Configuration

Object Management Workbench Configuration

The Object Management Workbench (OMW) is the first change management system for ERP 8.0 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 ERP 8.0 development to provide better control of ERP 8.0 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.

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 *ERP 8.0 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 *ERP 8.0 Development Tools Guide*.

The Object Management Workbench (OMW) is a software change management system designed to provide better overall control of the development process.

Projects

A ERP 8.0 project consists of a group of ERP 8.0 objects or Object Management Workbench projects that have been created or modified by a developer to complete a task. All work on objects within ERP 8.0 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 *ERP 8.0 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 a 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 ERP 8.0, an object is a reusable entity created by ERP 8.0 Tools based on software specifications. ERP 8.0 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, ERP 8.0 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.
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 up tokens for release at a predefined object transfer point.

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.

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.

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.
SAR System Integration	Enables you to disable SAR system integration with the Object Management Workbench, and thus with ERP 8.0 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.
Activity Rules	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:

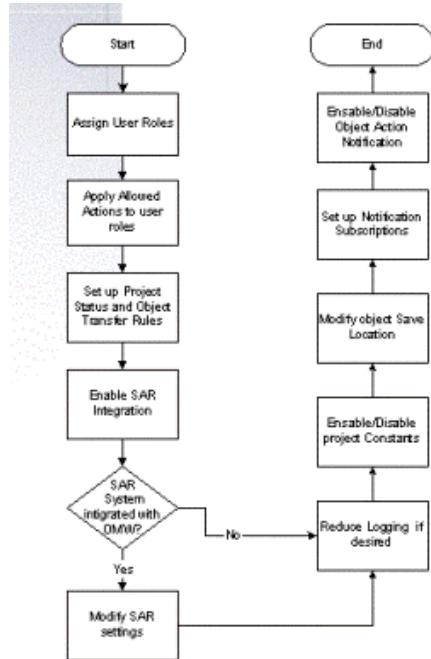
Assigning User Roles	See <i>Configuring User Roles and Allowed Actions</i> .
Applying Allowed Actions to Users	See <i>Configuring User Roles and Allowed Actions</i> .
Disabling SAR Integration with Object Management Workbench	See <i>Configuring OMW Functions</i> .
Setting Up Project Constants	See <i>Configuring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

Adding, Modifying and Deleting Notification Subscriptions

See *Configuring Notification Subscriptions*.

Viewing Major and Detail Logs

See *Working with 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 DV7334 location to the PY7334 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

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

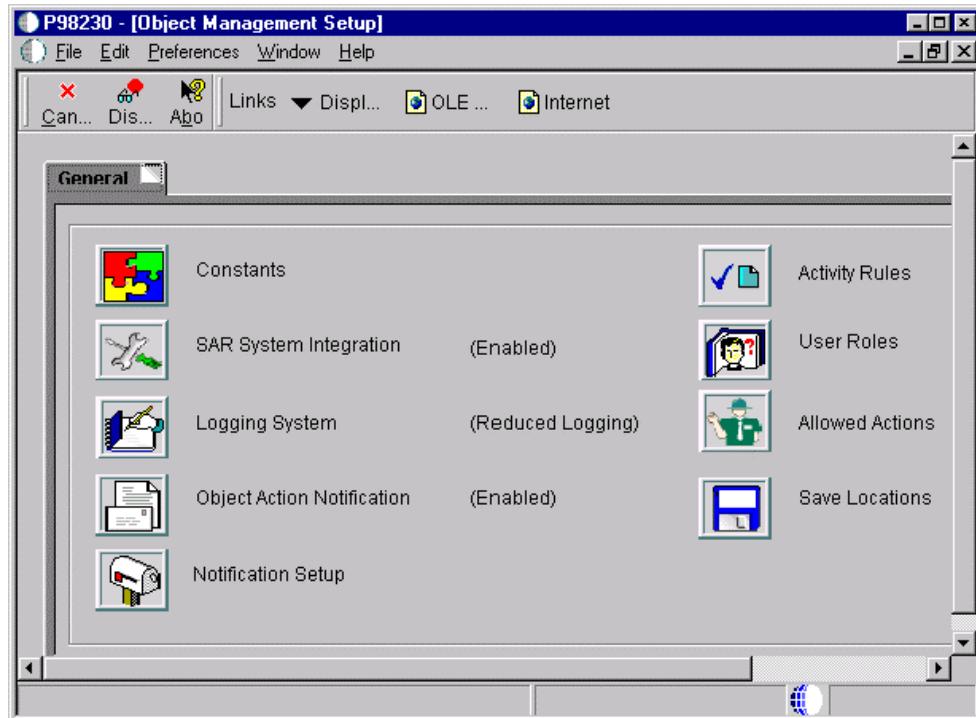
You should secure all actions, including project status change, for project statuses 40, 41, and 42 (Production Development, Transfer Production to Prototype, and Transfer Prototype to Development). These statuses allow administrators to apply fixes to objects in the Production path code and then to 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*.

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
		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
	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
21 - Programming	Developer	Remove users	Assign appropriate testing staff to project
		Status change	Advance project to next status
		Status change	Change project to Programming status (21)

Issue			
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**

From the Object Management menu (GH9801), choose Object Management Configuration.

1. On Object Management Setup, click User Roles.
2. Verify that 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:
 - Description 1

- Description 2
 - Hard Coded
 - Codes
 - User Defined Codes
 - Special Handling
 - Product Code
 - Codes
 - Description 1
 - Description 2
 - 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.

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

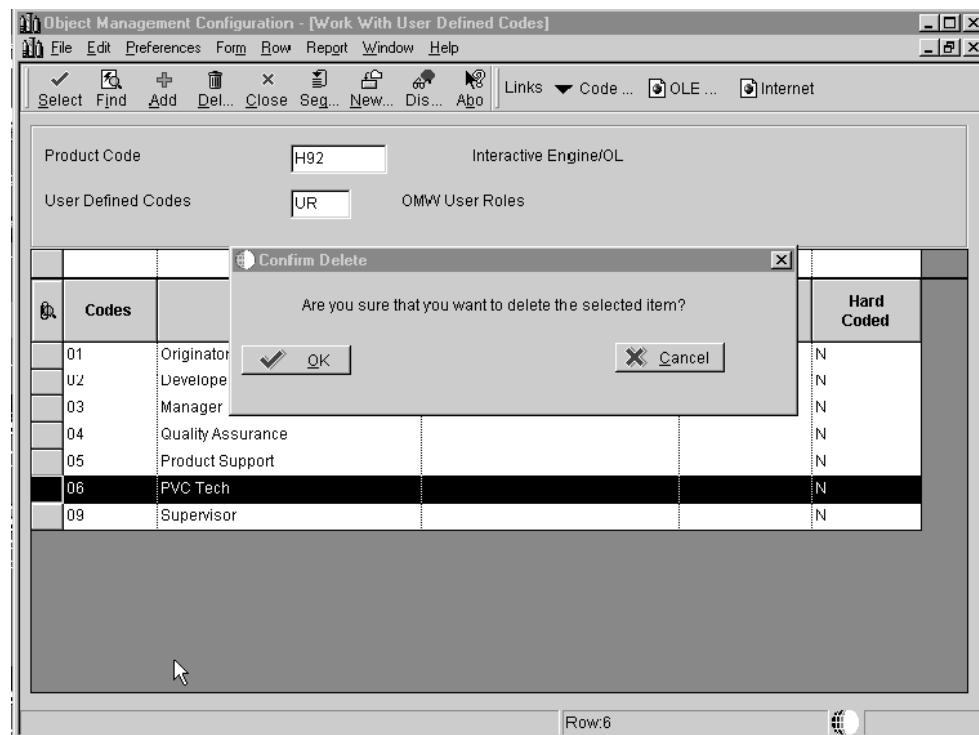
1. From the Object Management Setup form, click the User Roles button.
2. Select the user role you want to modify.
3. Double-click the first field you want to change, and modify it.
4. Repeat step 3 to make all modifications required.
5. Click Find and verify the modifications you made appear in the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

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

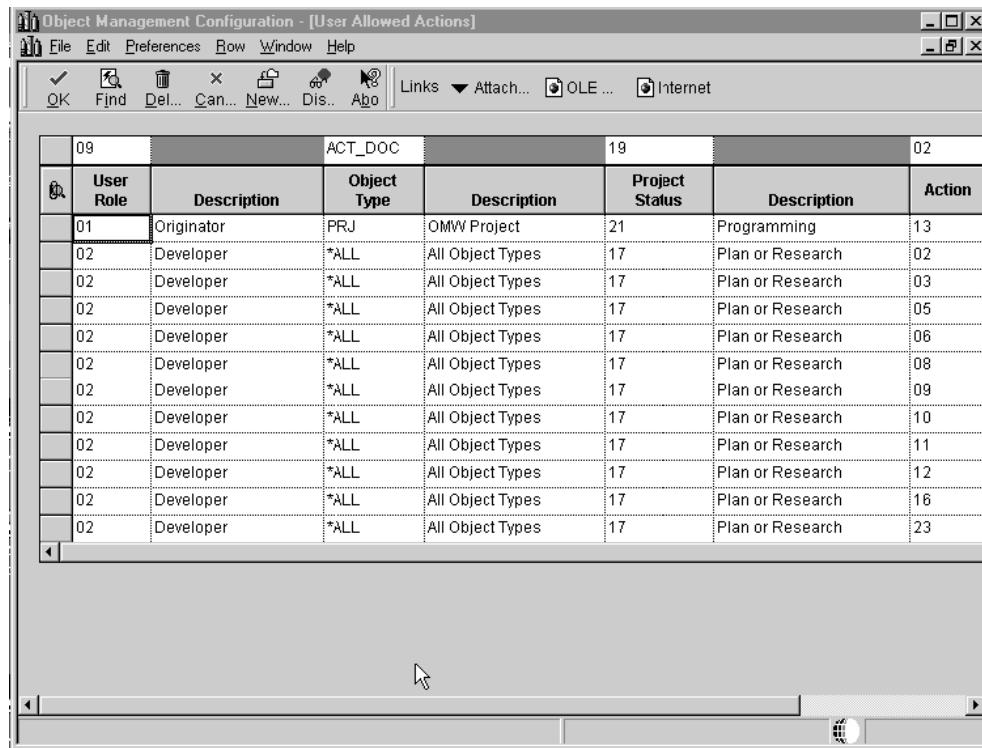
For example, if you want the developer to be allowed to check in all object types when the project is at project status 21, you would enter 02 - Developer in the User Role field, *ALL in the Object Type field, select 02 - Checkin in the Allowed Action field, and 20 - Programming in the Project Status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

Configuring OMW Functions

To configure OMW functions, you can disable the Software Action Request (SAR) system. This would be necessary if your company does not use SARs. You can also control logging detail and disable or limit development when logging fails. Finally, you can set up project constants to track the course of project development.

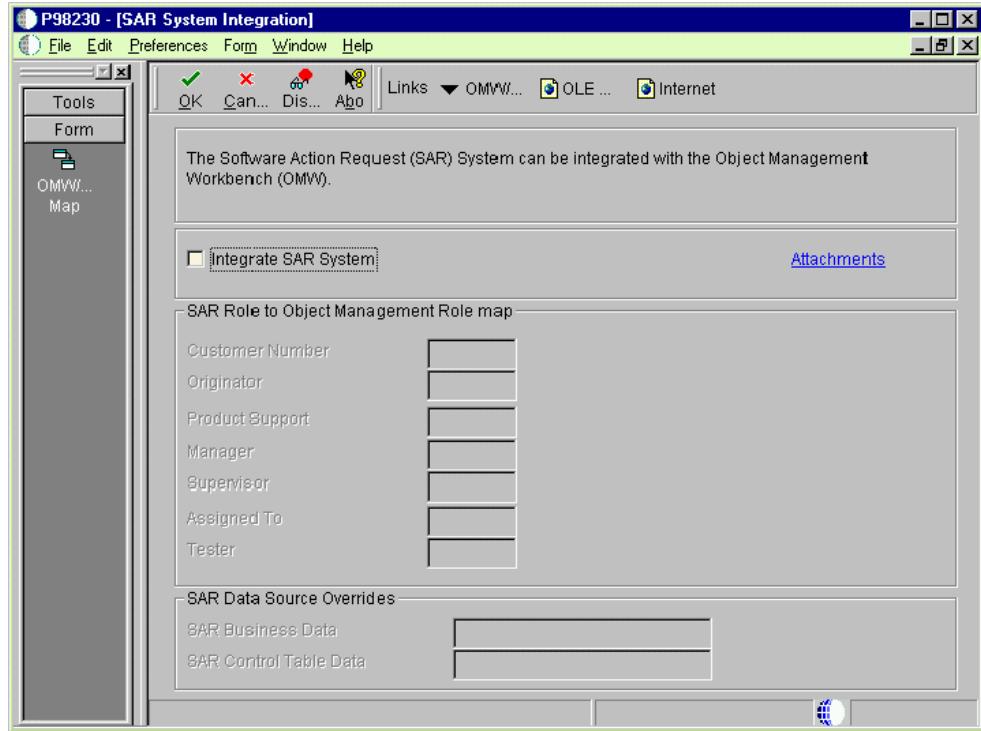
Disabling SAR Integration

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.



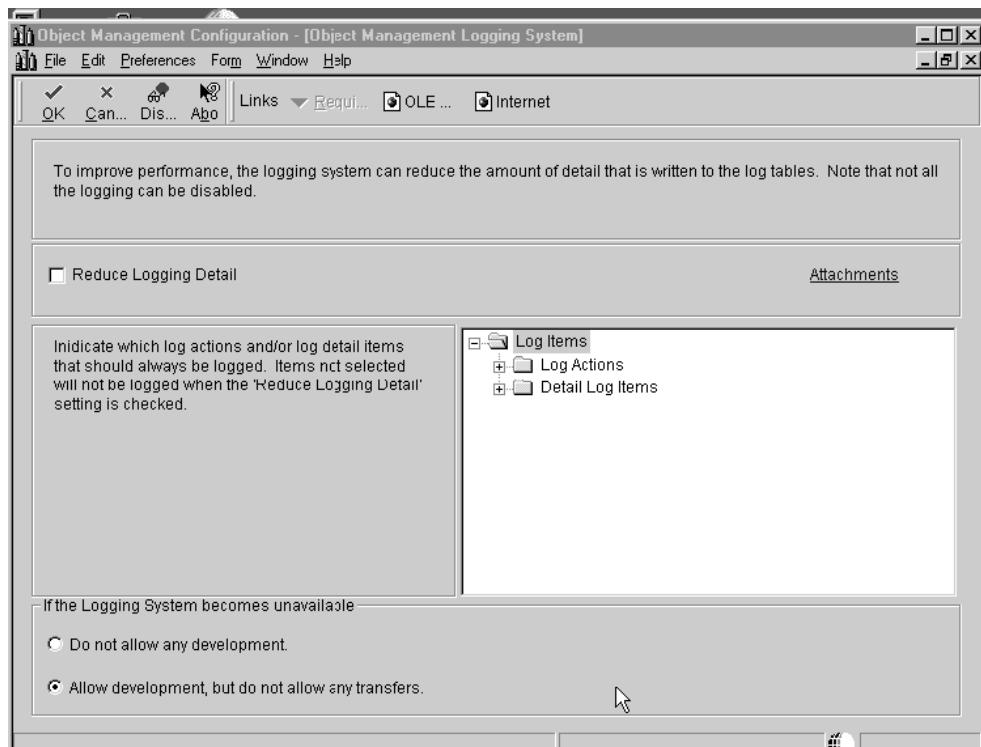
2. Make sure the Integrate SAR System option is blank.
3. Verify that all other fields are grayed out and deselected.
4. Click OK.

Controlling Logging Detail

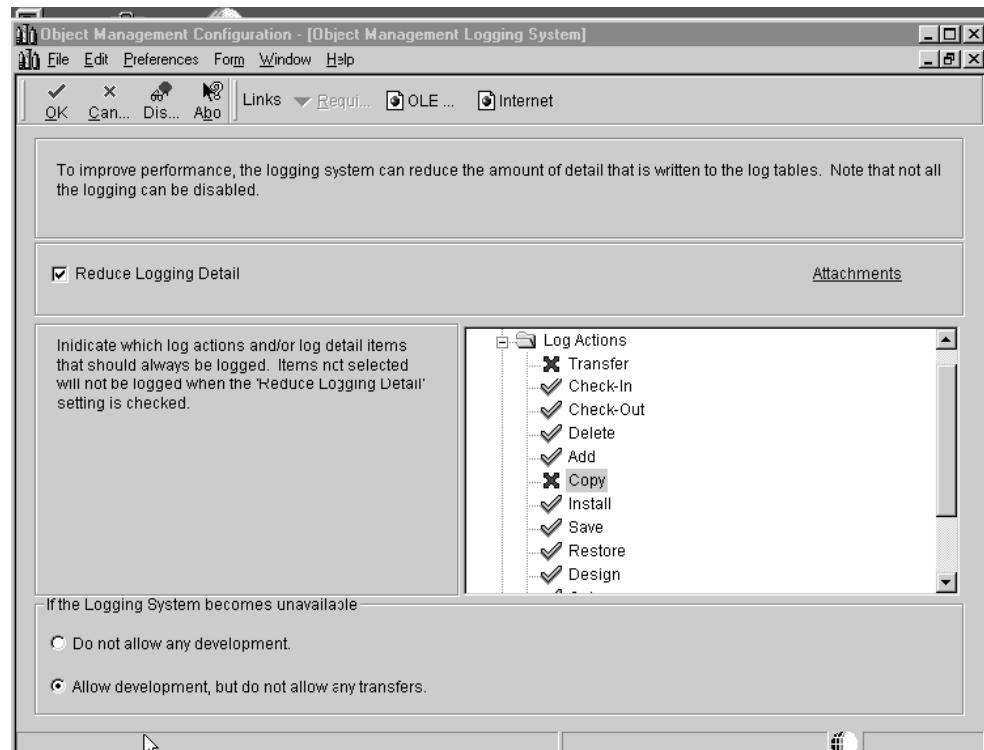
The Object Management Logging System form enables you to specify which project and object events you wish to have logged.

► 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.

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.

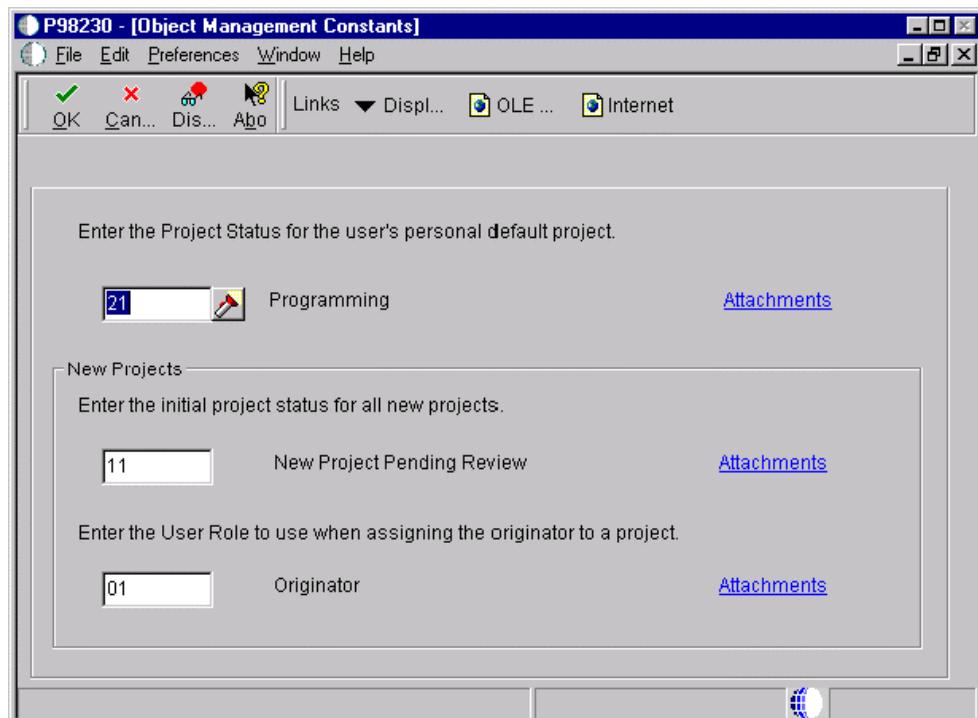
Setting Up Project Constants

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.

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

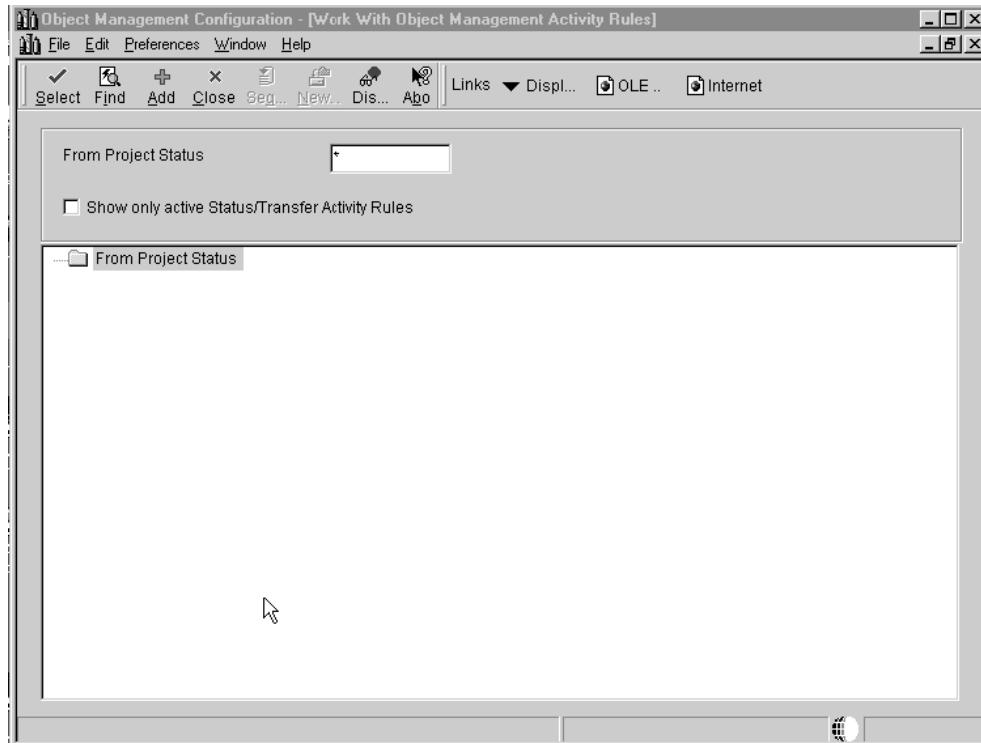
The installed project statuses and their definitions are:

- 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**

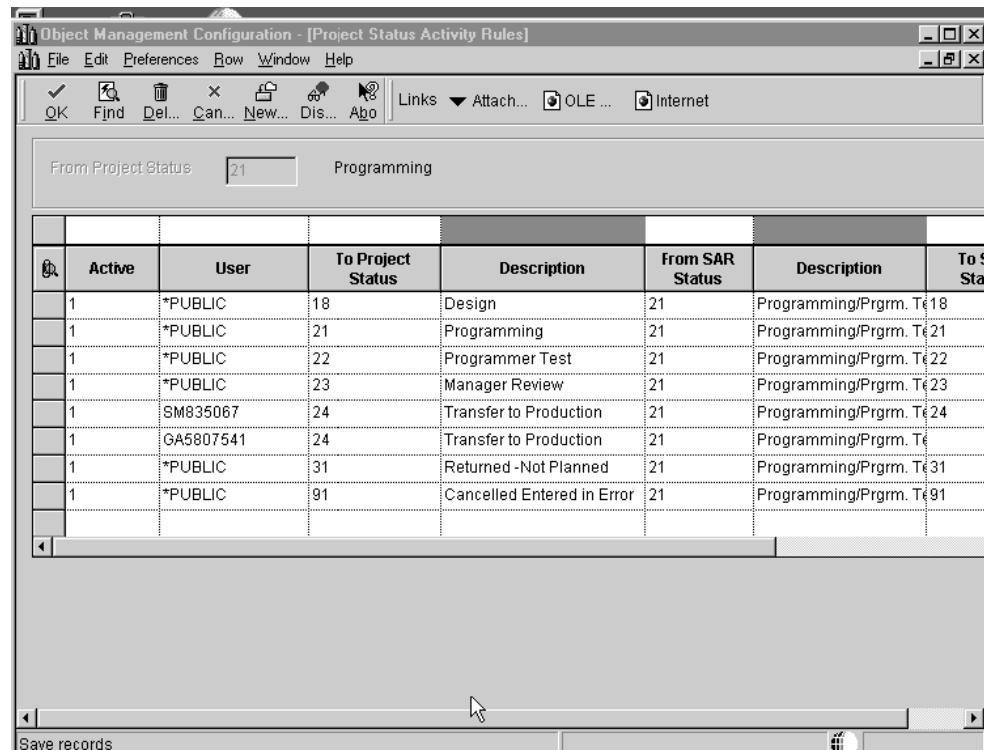
1. From the Object Management Setup form, click the Activity Rules button.



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

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.

- User

- 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.

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:

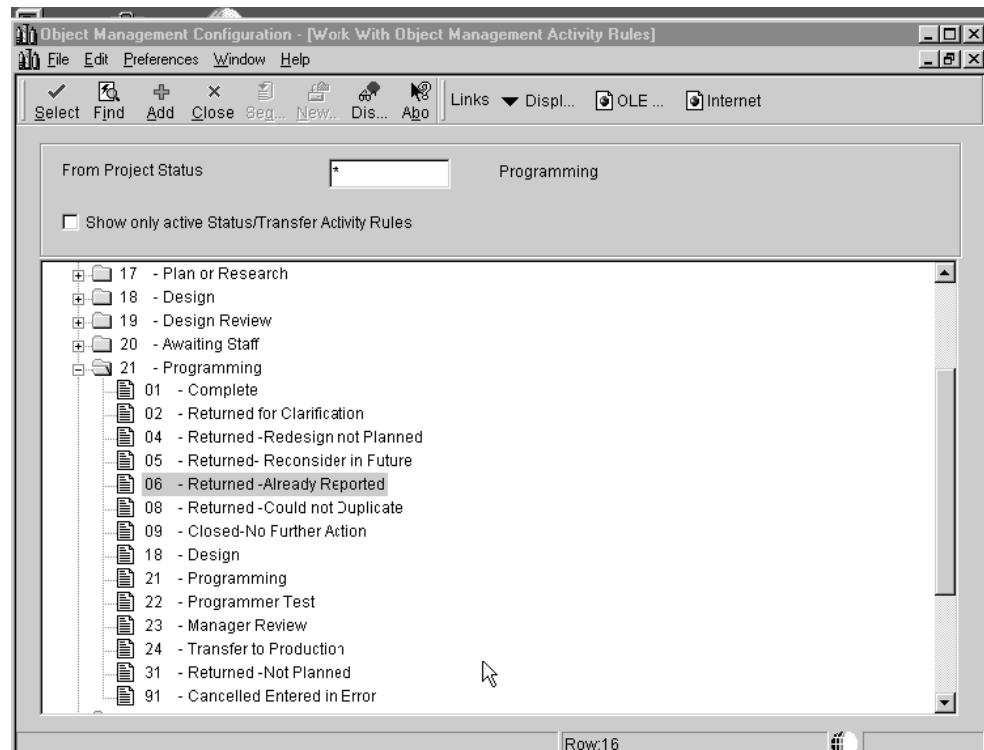
- Define FROM and TO transfer locations for each object type at each project status transition -- for example, when project status 21 (development) changes to project status 26 (prototype). In this example, objects are transferred from DV7334 to PY7334.
- Define checkout and get locations for Object 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 DV7334 to PY7334, and then to PD7334, you will want to set up rules to transfer the object from DV7334 to PY7334 and from DV7334 to PD7334, because the object could be retrieved in any order.

► To set up object transfer activity rules

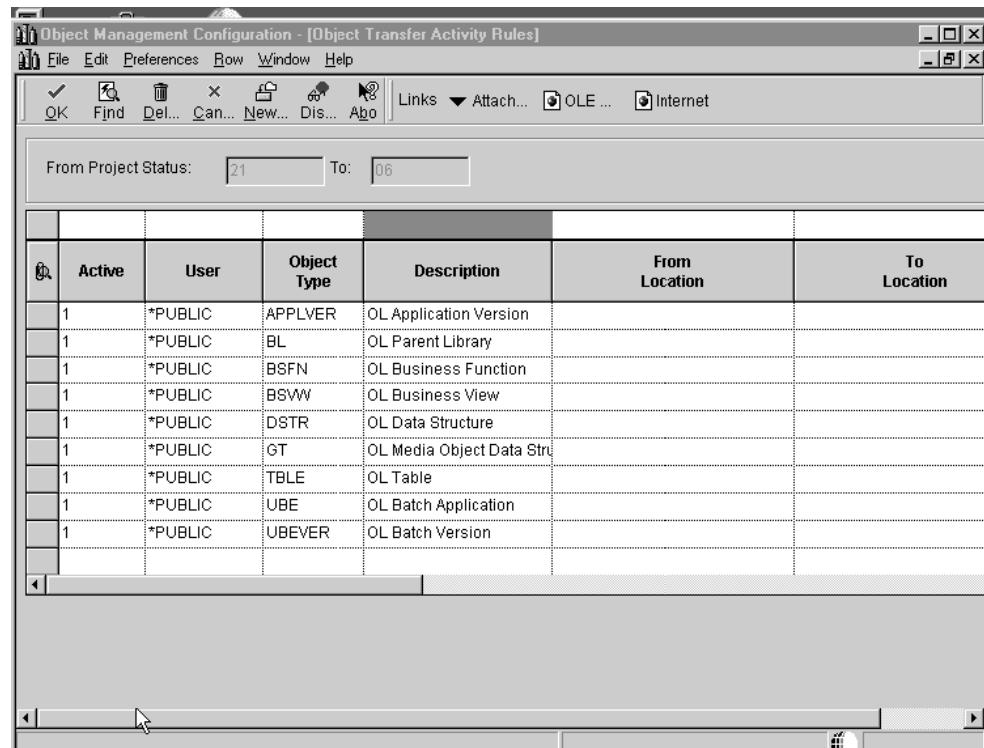
1. From the Object Management Setup form, click the Activity Rules button.
2. Click Find to display all available project statuses.



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 ERP 8.0 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.

Configuring Object Save Locations

Using OMW, you can create a save location, which is a path code developers use to save their objects. With the save location created, you add the path code to the system, allowing saved objects to be transferred. You can also modify or delete save locations.

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.

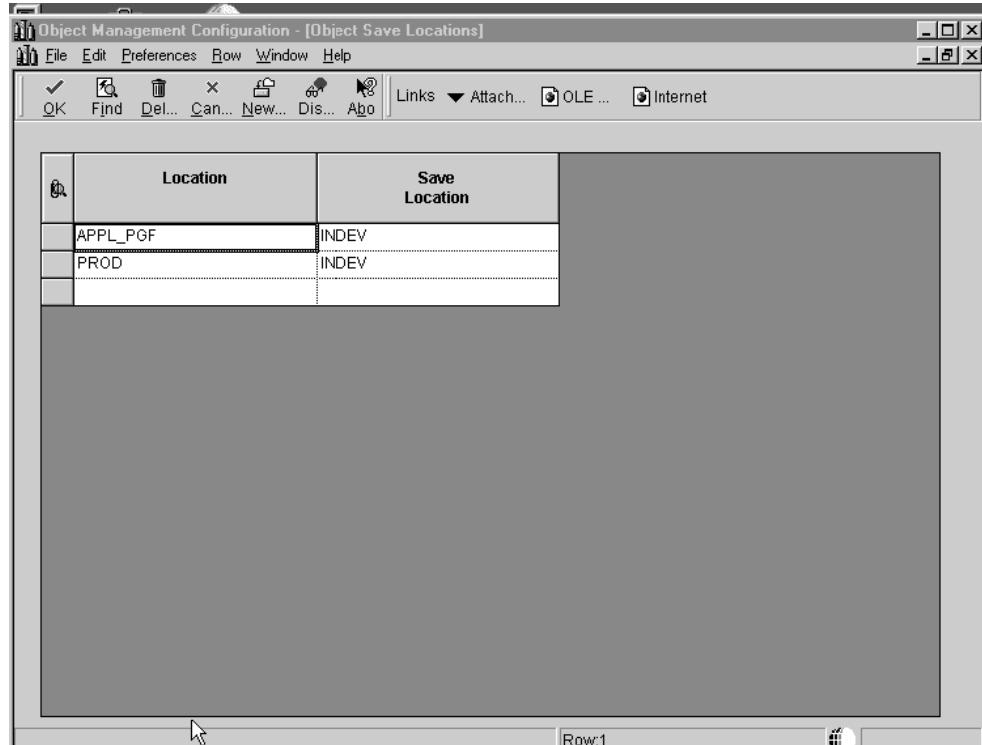
To create a save location, you create an empty path code. For information about creating a path code, see *Configurable Network Computing Implementation*, section "Path Code Setup."

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 ERP 8.0 is installed.

2. To add a new save location, click a blank field in the Location column.
3. Click the visual assist button.

Object Management Configuration - [Object Path Search & Select]

File Edit Preferences Window Help

Select Find Close Seq... New... Dis... Abo Links Disp... OLE... Internet

Path Code	Description	Location	Server Share Path
A7332	Applications Develop - A7332	INTELNTC	OWENVIRON\environ\envappstappl_pgf
APPL_81	B81 PATH CODE	INTELNTC	OWENVIRON\environ\envappstB81
APPL_PGF	Applications Development	INTELNTC	OWENVIRON\environ\envappstappl_pgf
ATEXTID	APPL Text ID Path Code	INTELNTC	OWENVIRON\environ\enviroNIEVTOOL
B7312	MASTERS B73.1.2	INTELNTC	OWENVIRON\environ\MASTERS\MSTRB7
B7321CTL	B7321 Archived Control Tables	INTELMSTR	GROUPI\PVC\Masters\Prstb733
B7322CTL	B7322 Archived Control Tables	INTELMSTR	GROUPI\PVC\Masters\Prstb733
B732CTL	B732 Archived Control Tables	INTELMSTR	GROUPI\PVC\Masters\Prstb733
B7331CTL	B7331 Archived Control Tables	INTELMSTR	GROUPI\PVC\Masters\Prstb733
B7332CTL	B7332 Archived Control Tables	INTELMSTR	GROUPI\PVC\Masters\Prstb733
B7333CTL	B7333 Archived Control Tables	INTELMSTR	GROUPI\PVC\Masters\Prstb733
BLDCCTL	Build 21 control table	BUILD21	b7
BLOBB733	oneworld db blob	INTELNTC	OWENVIRON\environ\MASTERS\MSTB73
BLOBJSH	oneworld db blob	INTELNTC	OWENVIRON\environ\MASTERS\MSTB73
C7332	Masters B7332 Code Change Pat	INTELNTC	OWENVIRON\environ\MASTERS\MSTB73
CANDACETST	Test for Candace	INTELNTC	owenviron\environ\appl_pgf\appl_pgf
DEVB7332	+ Development 37332 ESU path	INTELNTG	B733

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.

Object Management Configuration - [Object Save Locations]

File Edit Preferences Row Window Help

OK Find Del... Can... New... Dis... Abo Links Attach... OLE... Internet

Location	Save Location
APPL_PGF	INDEV
PROD	INDEV
B7322CTL	

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.

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.

► 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

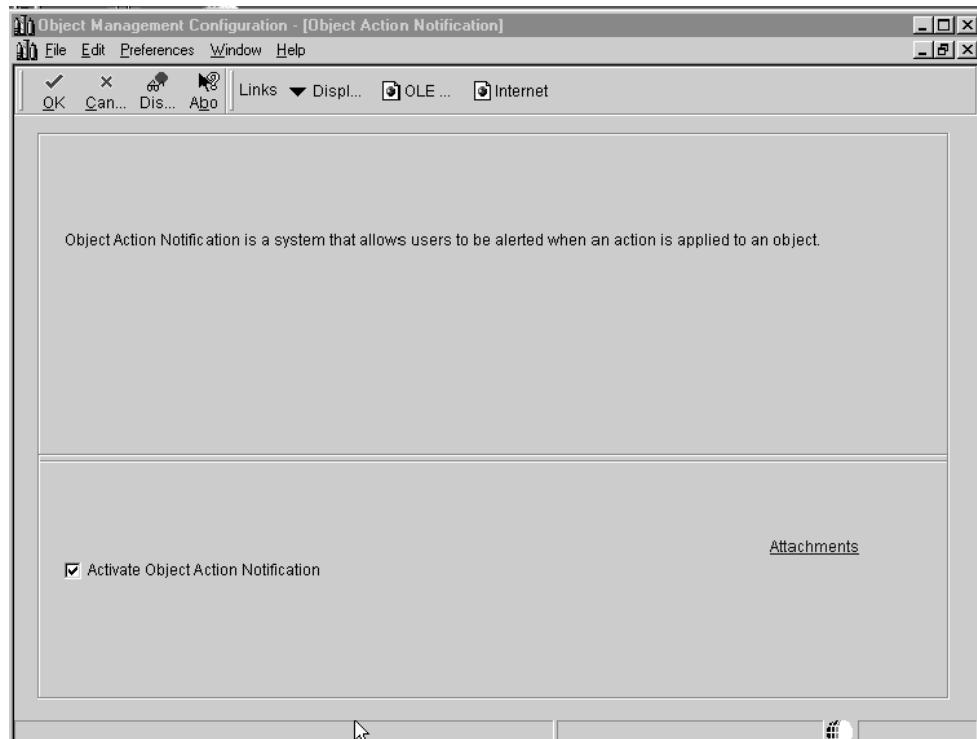
Notification subscriptions allow you to alert users of changes made to the objects in the system. After you enable object notification, you can add, modify, delete, or sort notification subscriptions.

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:

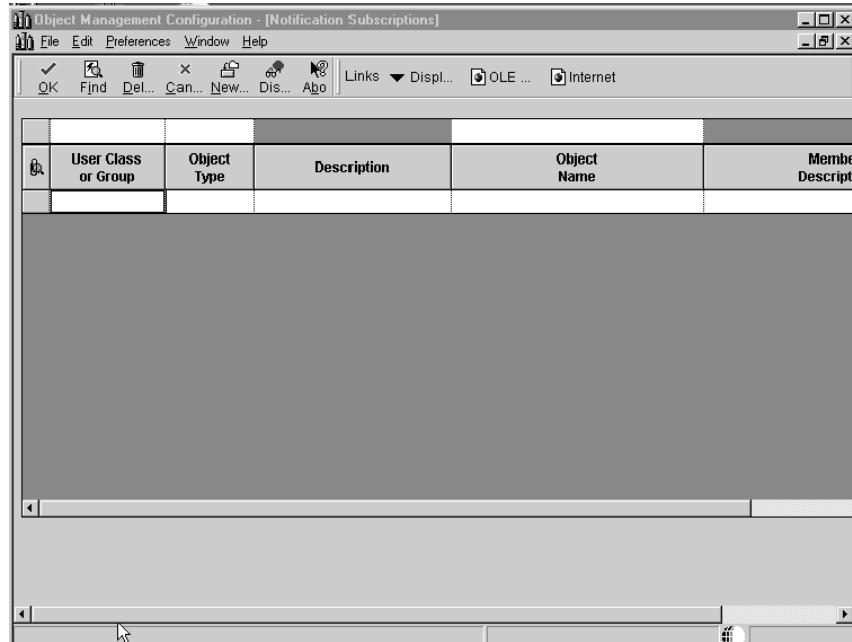
Notification that users are added to or removed from projects always occurs, even when object action notification is disabled. In this situation an e-mail message is sent to the user.

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.

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

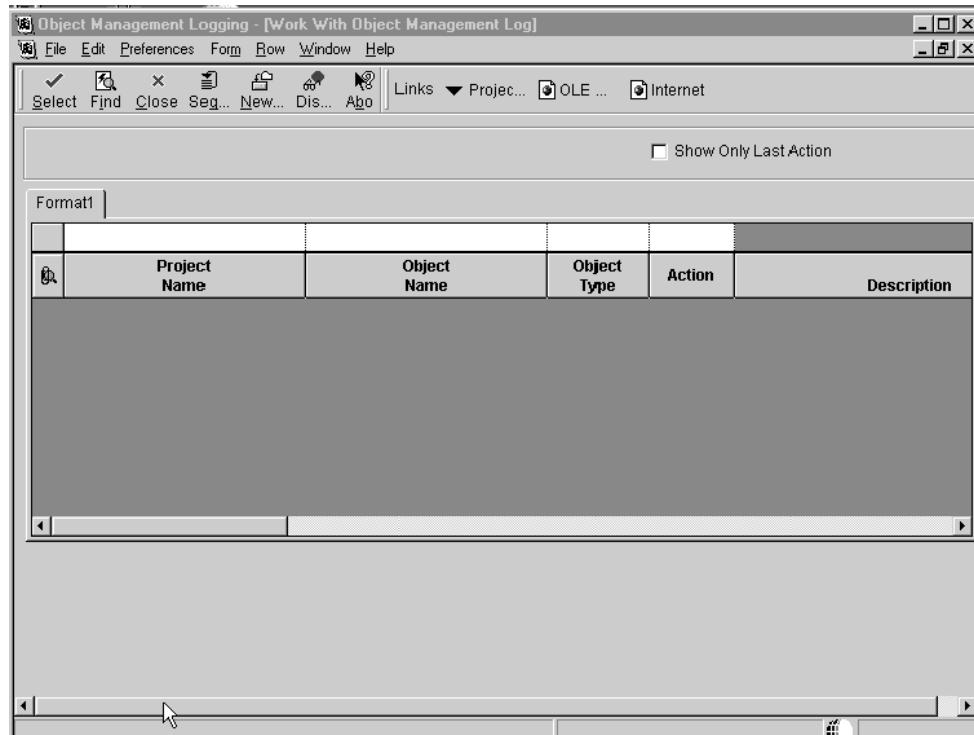
The Object Management Workbench contains an object management logging application. Project and object logs provide an excellent way to review the development history of projects or objects. This application also allows you to reorder log fields to customize software development reporting.

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.



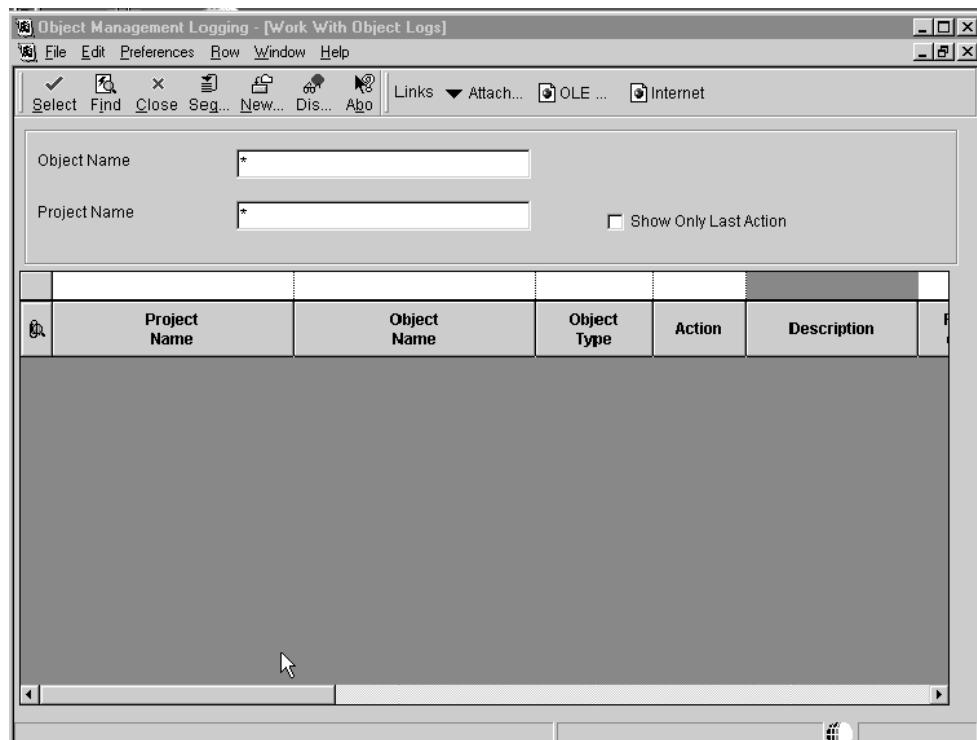
3. Perform one of the following functions:
 - Click Find to view logs for all projects and their objects in OMW.
 - Enter sorting criteria in the Query By Example (QBE) cells to filter search results, then click Find.
 - Click the Show Only Last Action button to show only the last logging action for a given project or object.
4. Click Close.

Locating Object Logs

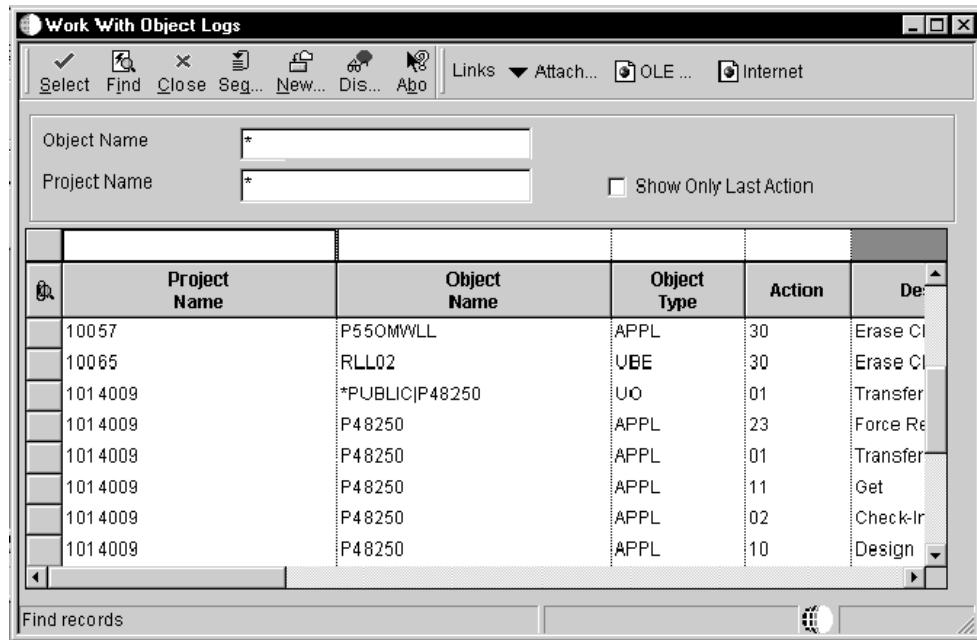
The Object Management Logging Application has a special form for quickly locating object logs. You can view all object logs you have permission to see, view selected object logs, or see only the last logging action for object logs.

► 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.



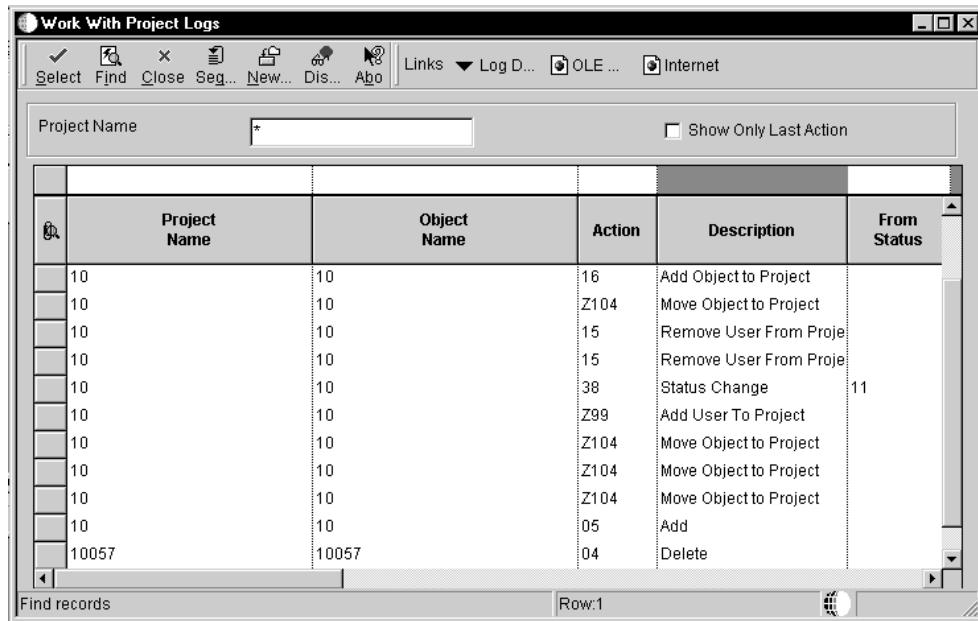
- Show the last logging action only by choosing the Show Only Last Action option.
 - Check for object attachments by clicking the Check for Attachments button.
5. Click Close.

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.
 - 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.

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.

Object Management Logging - [Work With Log Detail - 10057/10057]

File Edit Preferences Row Window Help

Select Find Close Seg... New... Dis... Abo Links Attach... OLE... Internet

	Log Sequence	Log Data Item	Description	Program ID	Machine Key
1	136F		Action AddUserToProject was ca	OMW	LEWVL
2	135Z		UserLL5903831AddedToProject06B	OMW	LEWVL

Find records

Work With Log Detail

3. 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.

Object Management Logging - [View Full Log Text]

File Edit Preferences Window Help

OK Can... Dis... Abo Links Disp... Previo... Next OLE... Internet

Action: AddUserToProject was called for:
 Project: 10057
 Object: LL5903831
 Type: 06
 by User: LL5903831

Work With Log Detail View Full Log Text

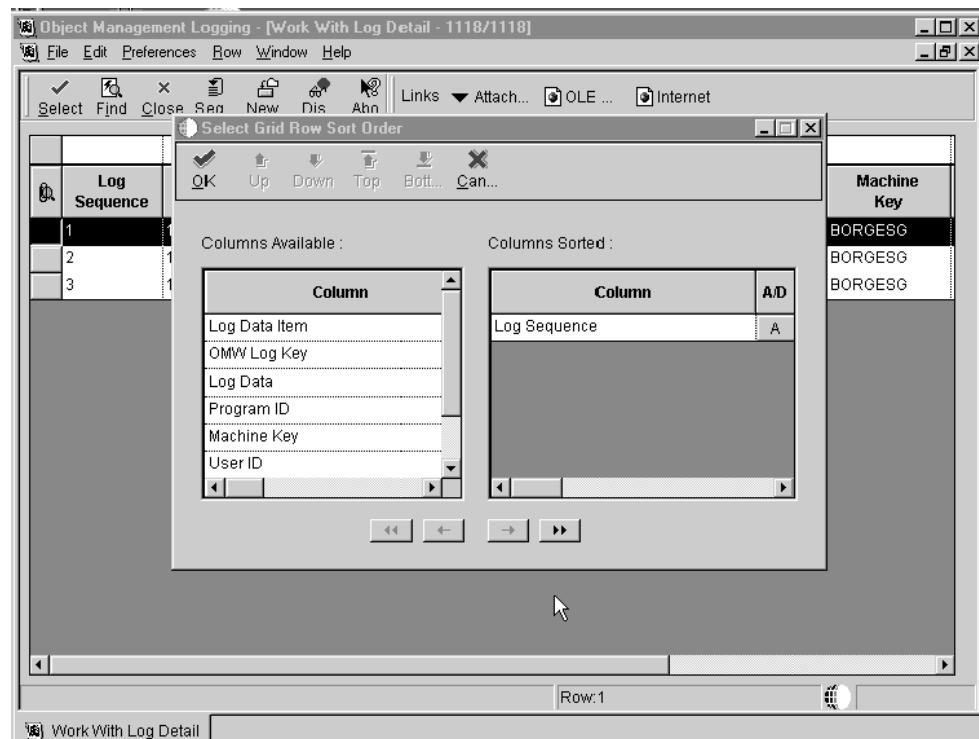
4. You can move between detail logs by clicking the Previous and Next buttons.
5. Click Close.

Reordering Log Detail Record Fields

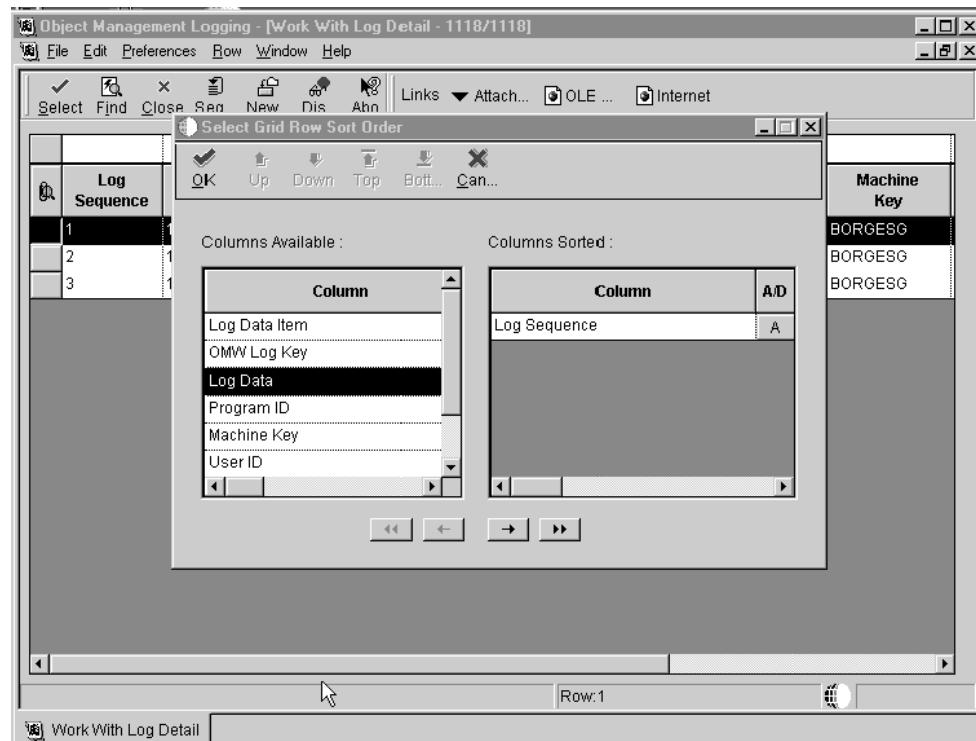
You can use the Select Grid Row Sort Order form to reorder the object or project log detail fields within a record. This information can then be printed out in the sort order you specified.

► To reorder log record fields

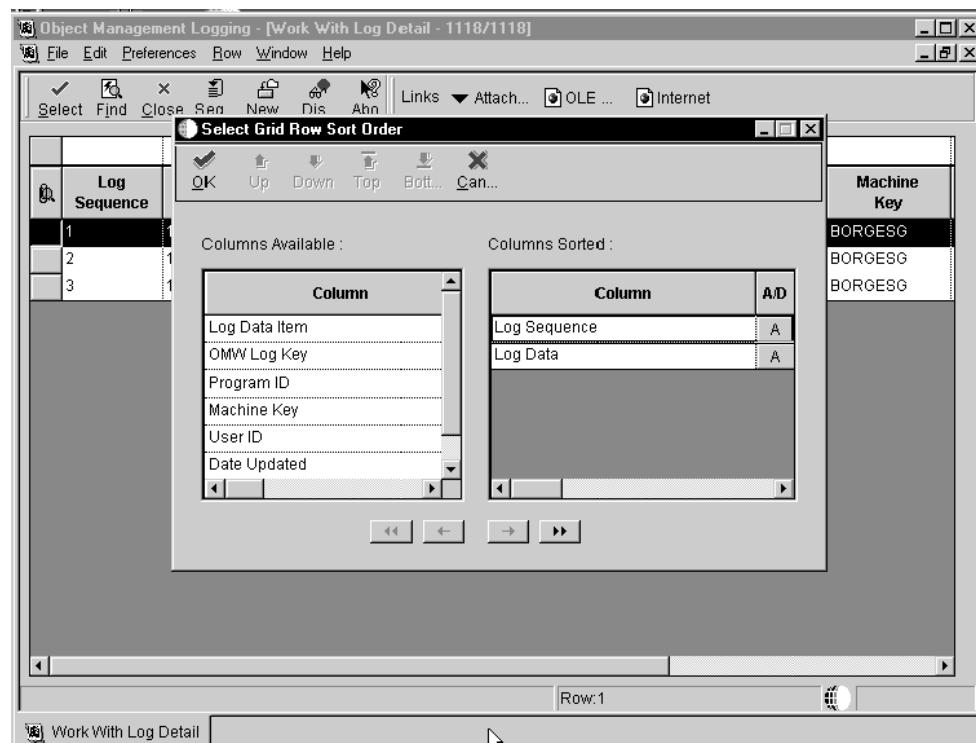
1. View log detail records as described in Viewing Detail Logs in this chapter.
2. Click Sequence.



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 worksheets to simplify configuring User Roles, Allowed Actions, Project Status Activity Rules and Object Transition Activity Rules in OMW.

Printing ERP 8.0 Reports

Printing ERP 8.0 Reports

The Printers application (P98616) provides a single point of entry for configuring your printers within ERP 8.0. The application allows you to define printers for workstations and enterprise servers. These definitions reside in ERP 8.0 tables that are maintained by the Printers application (P98616).

In addition to creating your own reports, ERP 8.0 includes a number of predefined reports and report versions, which you can use and modify for your business needs. ERP 8.0 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 *ERP 8.0 Foundation Guide* for more information about submitting and printing a report.

Understanding ERP 8.0 Printing

When you submit a ERP 8.0 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. ERP 8.0 generates this information from the printer tables for all platforms.

ERP 8.0 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, ERP 8.0 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 ERP 8.0 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. ERP 8.0 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

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, ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 embedded 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 or not a report prints immediately and whether or not ERP 8.0 saves the output after processing the report.

```
[NETWORK QUEUE SETTINGS]
PrintImmediate=TRUE/FALSE
SaveOutput=TRUE/FALSE
```

Setting	Description
PrintImmediate	Specifies whether or not 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

ERP 8.0 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.

Note:

You must set up printers for each server platform that you use in your enterprise.

See Also

- ❑ *Understanding ERP 8.0 Printing* for information about how ERP 8.0 determines which printer to print to when a user submits a report.

► To add a new printer

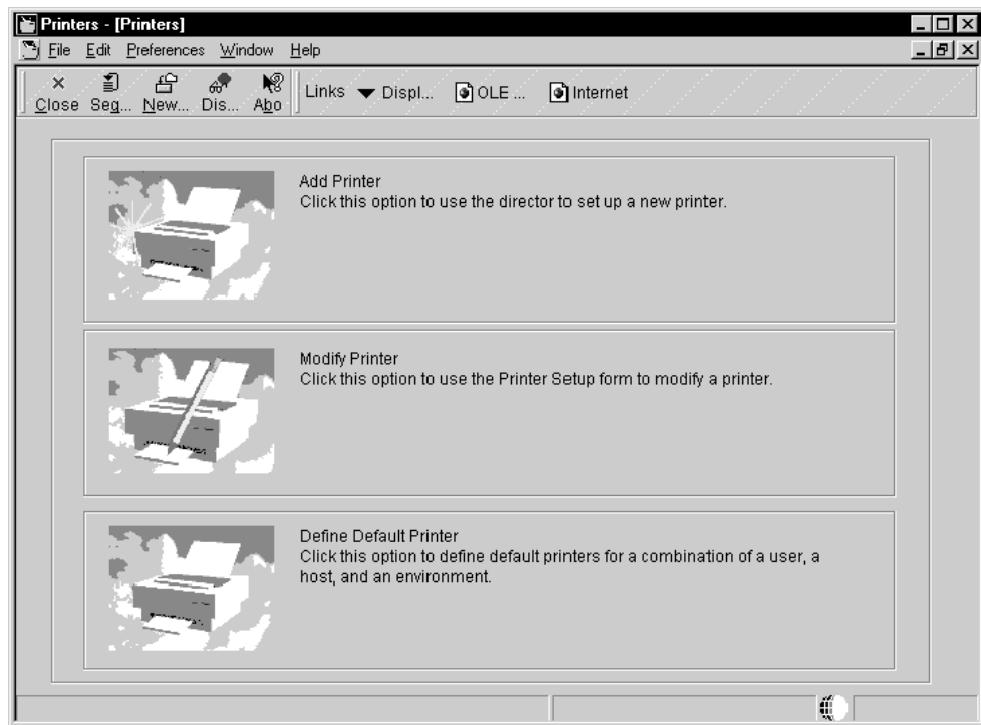
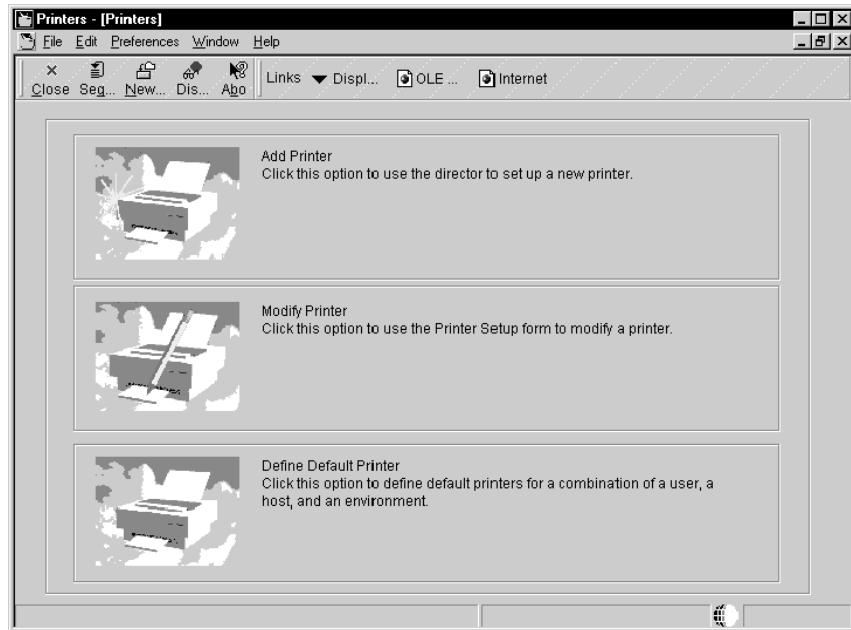
When you add a printer, ERP 8.0 provides a director to help you with each step of the process. Instructions appear on each form of the director to guide you through the printer addition process. The following procedure should be used in conjunction with the steps that appear on the Printer Setup director.

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:

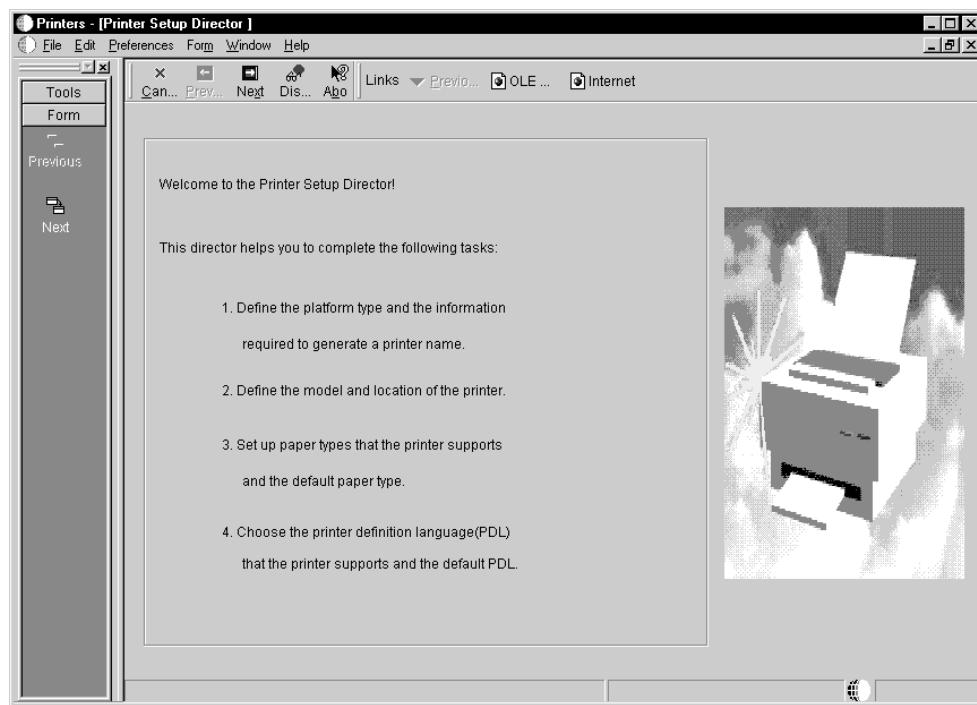
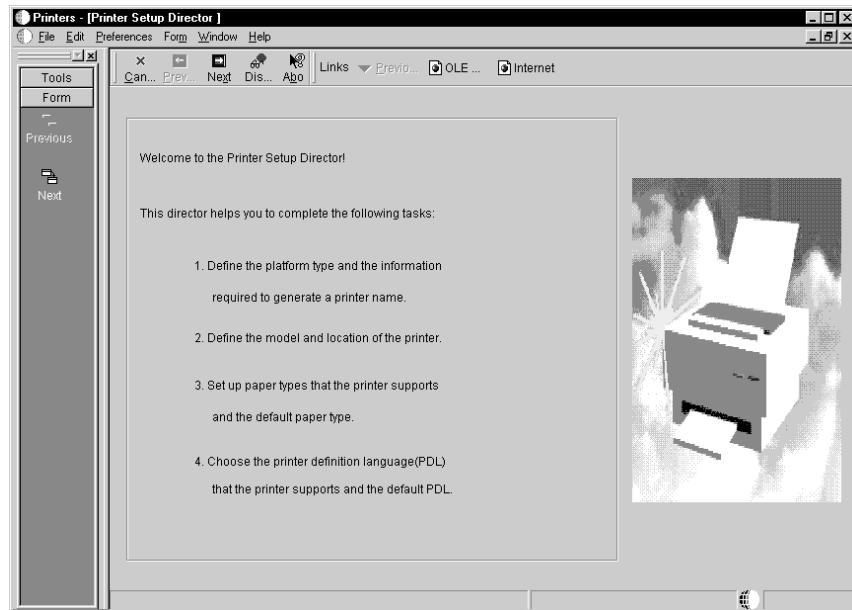
You must complete all of the fields that appear on the director forms.

1. On the Printers menu (GH9013), choose Printers (P98616).



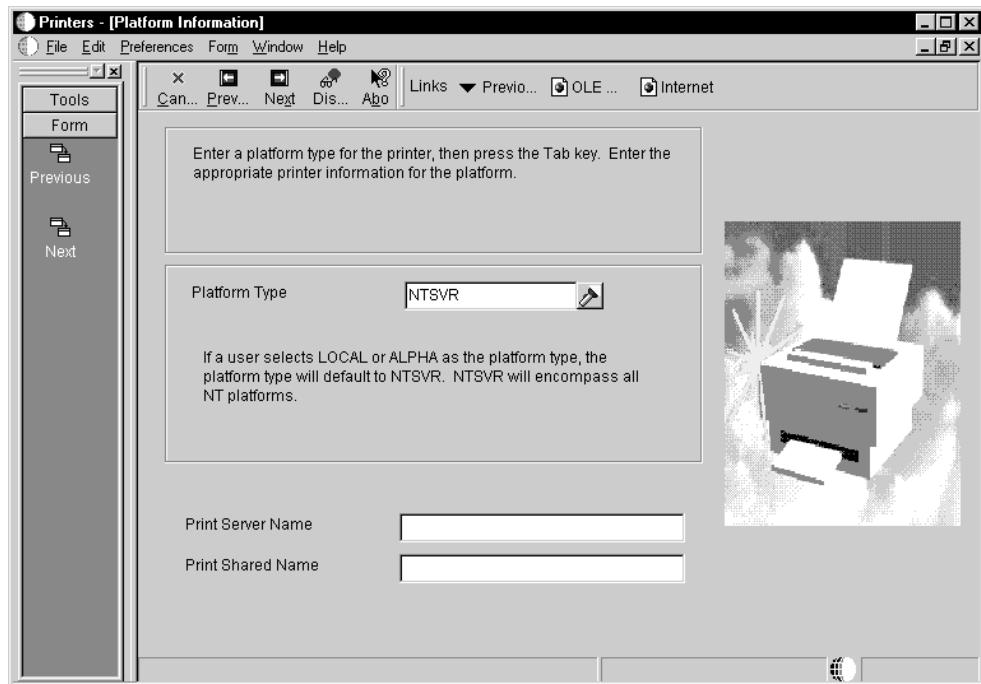
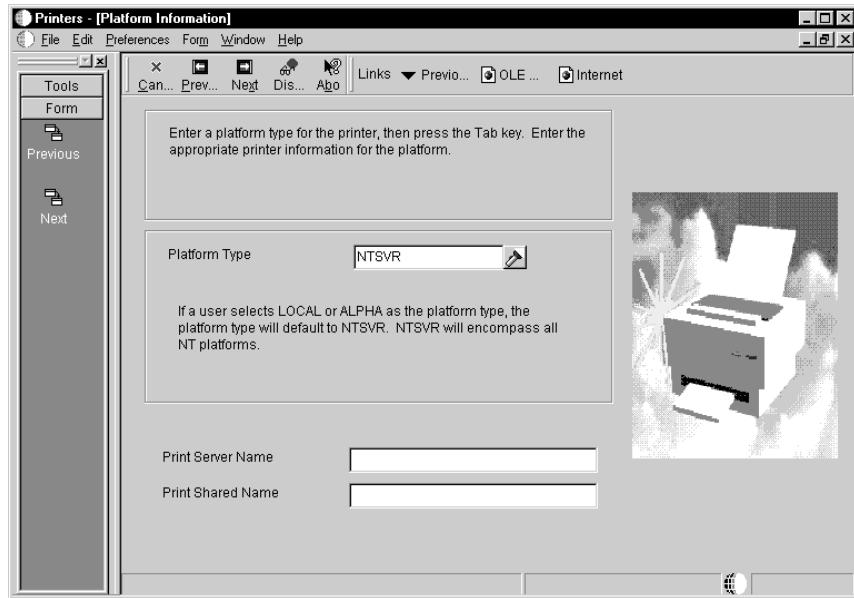
2. On the Printers form, click Add Printer.

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 ERP 8.0 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. ERP 8.0 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.

- **Windows NT:** *\server name\printer name*

Example: \\corptrs1\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.

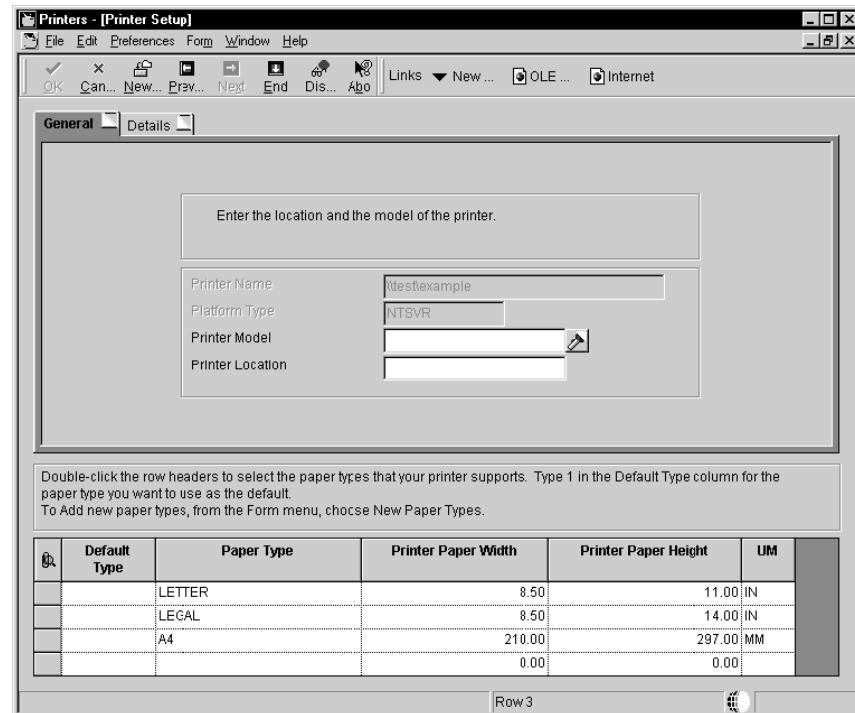
- Print Shared Name

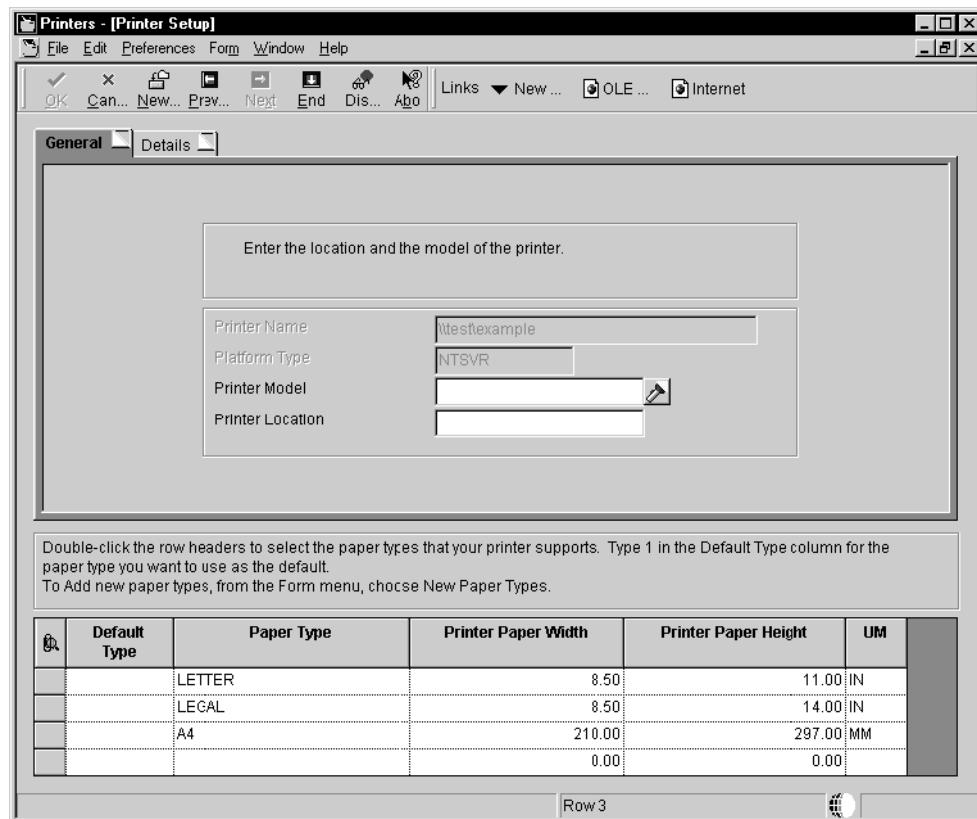
Type the share name of the printer that you are setting up. You cannot use spaces or special characters in this field. ERP 8.0 uses this name, along with the print server name, to create the printer name, which appears grayed-out on the subsequent form.

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:

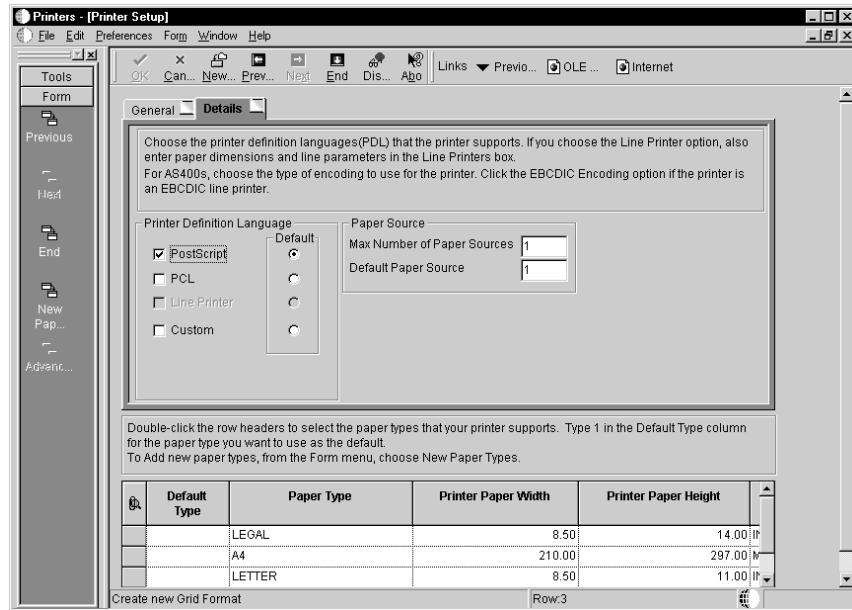
When you change an existing printer, this is the page where you make your modifications. See the task *To modify an existing printer*.

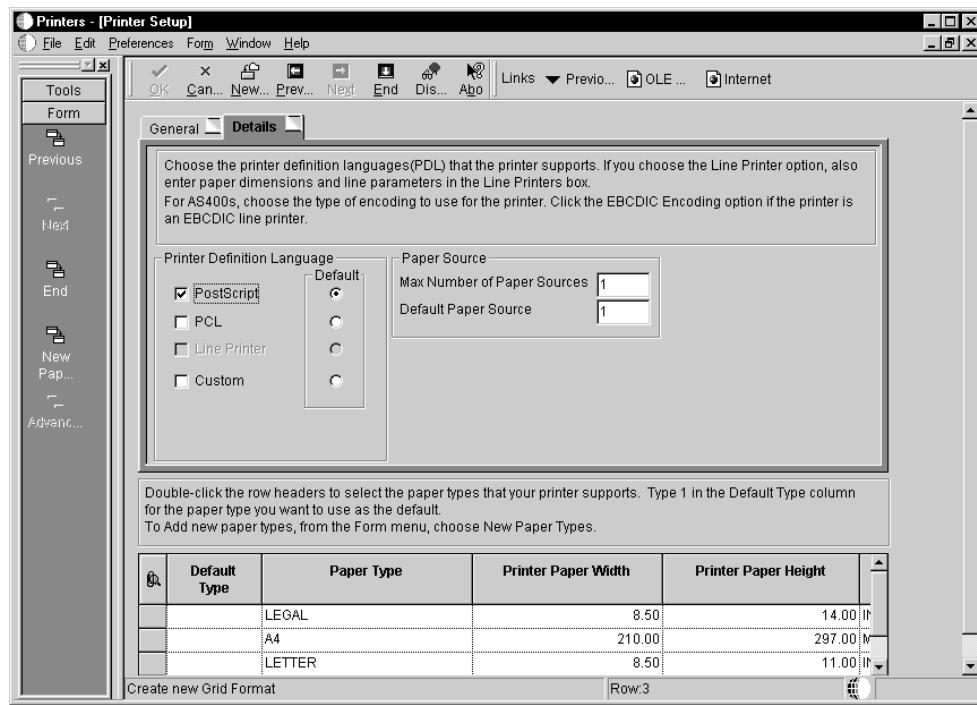




5. On the General tab, complete the following fields, and then click the Details tab:

- 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, ERP 8.0 disables the Line Printer option. If you choose the Line Printer option from the left side of the box, ERP 8.0 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:

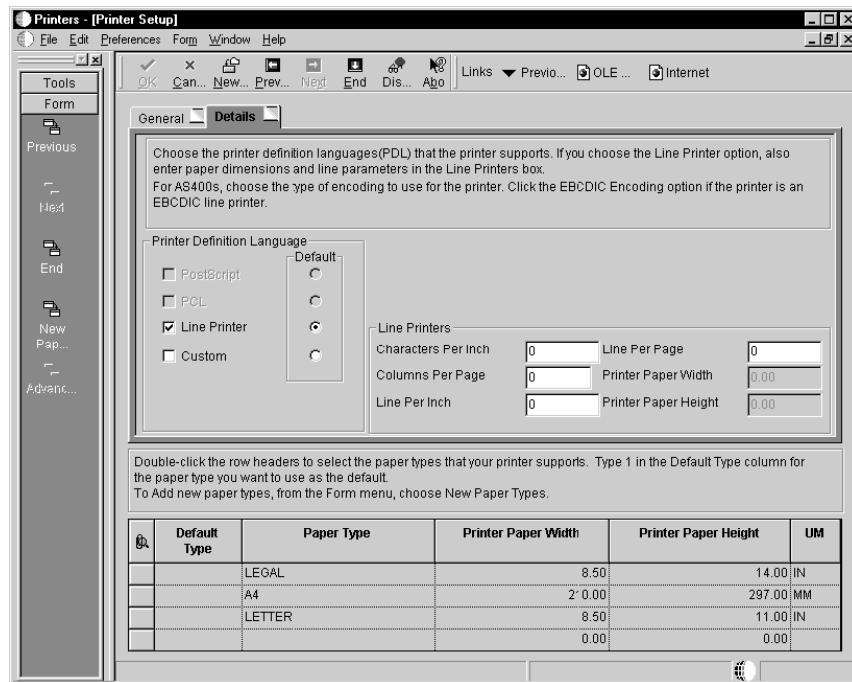
- ERP 8.0 disables the detail area at the bottom of the form. Any paper types that you chose are cleared. ERP 8.0 automatically provides a printer type of *JDE LINE PAPER for the printer.
- Fields appear within a box labeled "Line Printers." You use these fields to set the paper dimensions and line parameters. This is fully explained in the following steps.

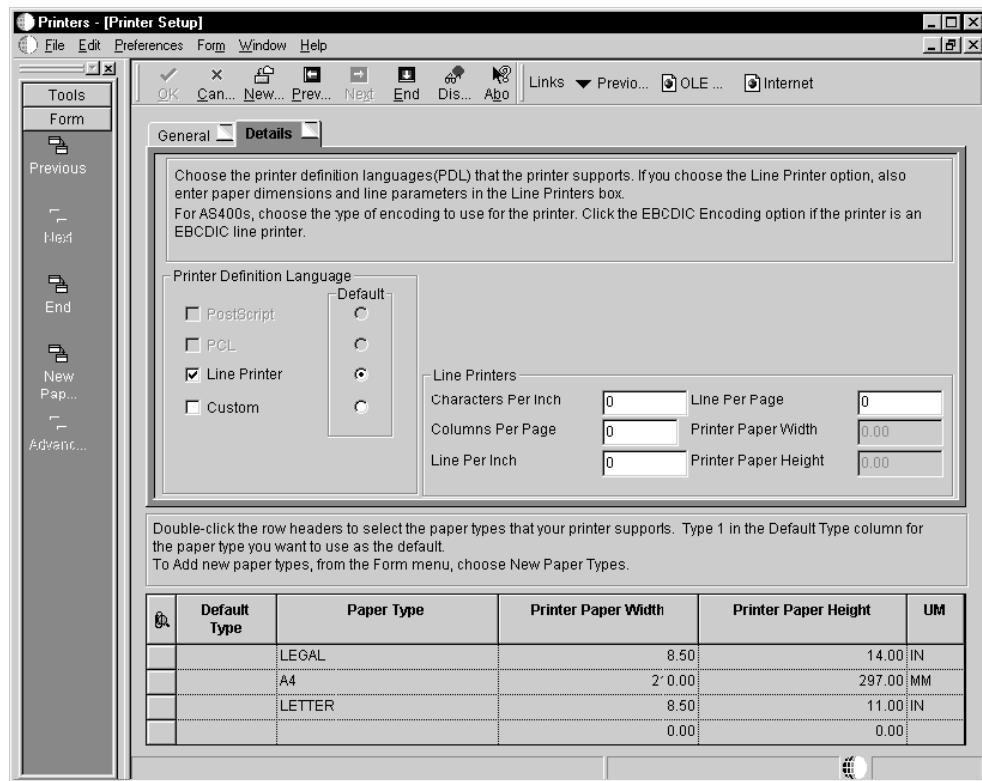
- When you choose the Line Printer option along with the AS/400 platform type, fields appear within a box labeled "AS400 Only." You use these fields to set the AS/400 encoding that your printer supports. This is fully explained in the following steps.
 - Custom

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.

- 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 ERP 8.0 to draw paper.
- 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.

- Line 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.

- Line 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.

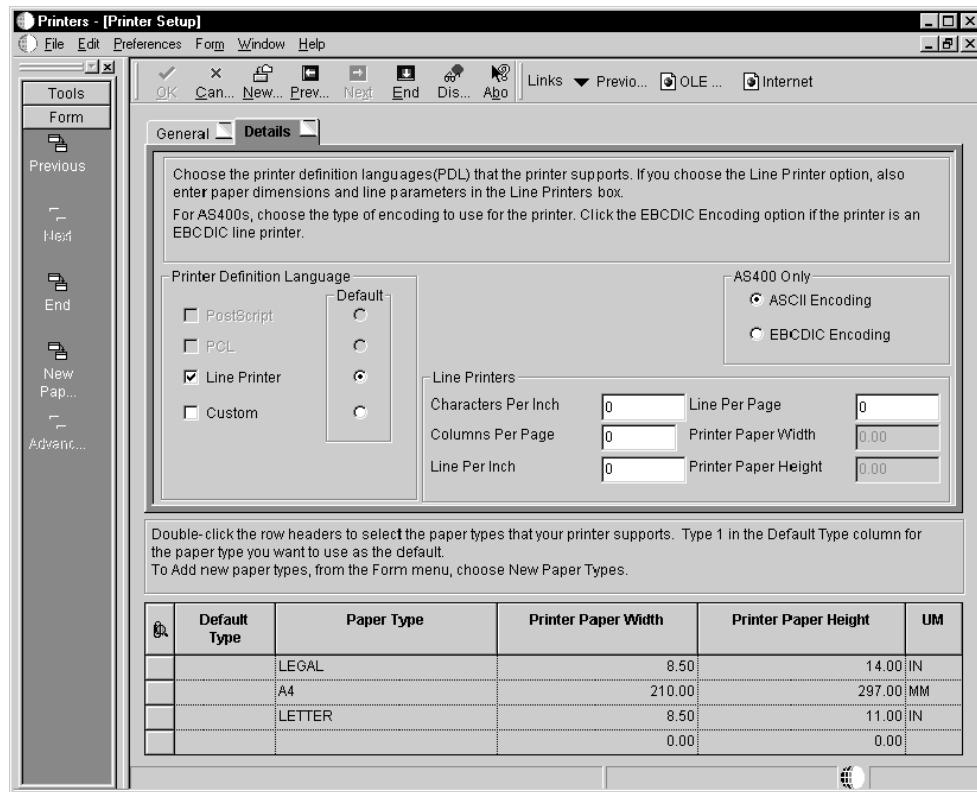
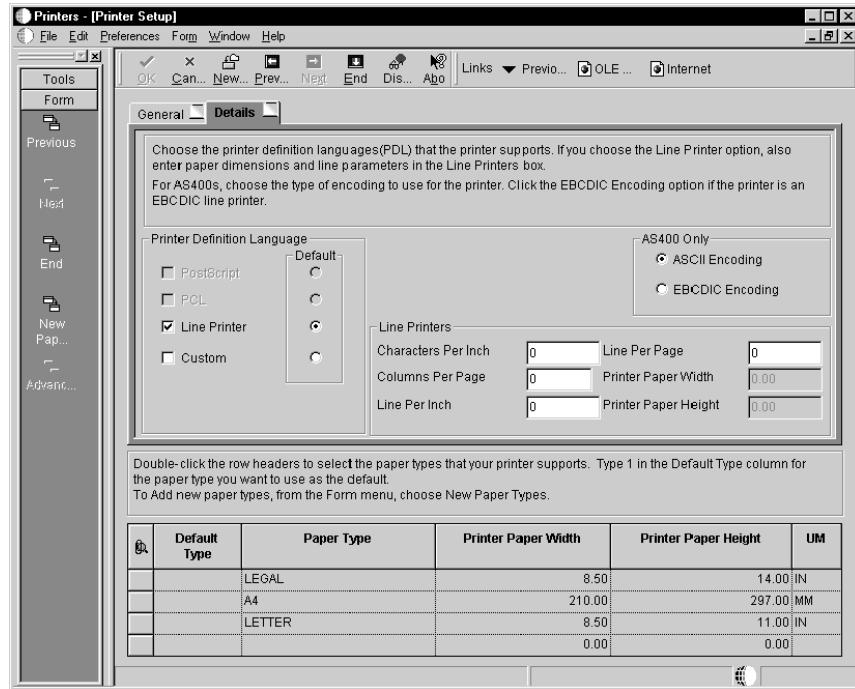
- Printer Paper Width

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.

- 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.

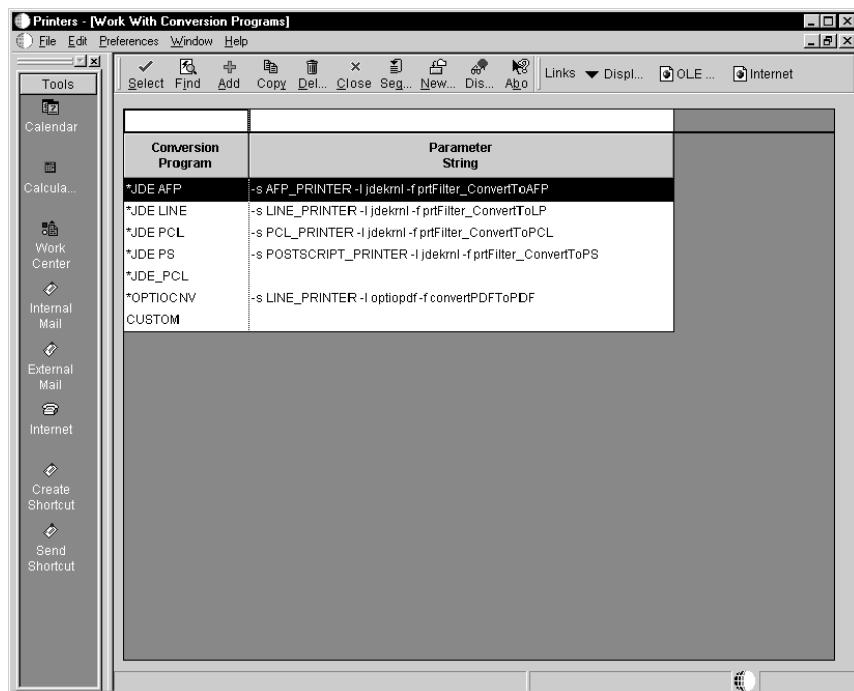
10. To use the Custom option, complete the following:

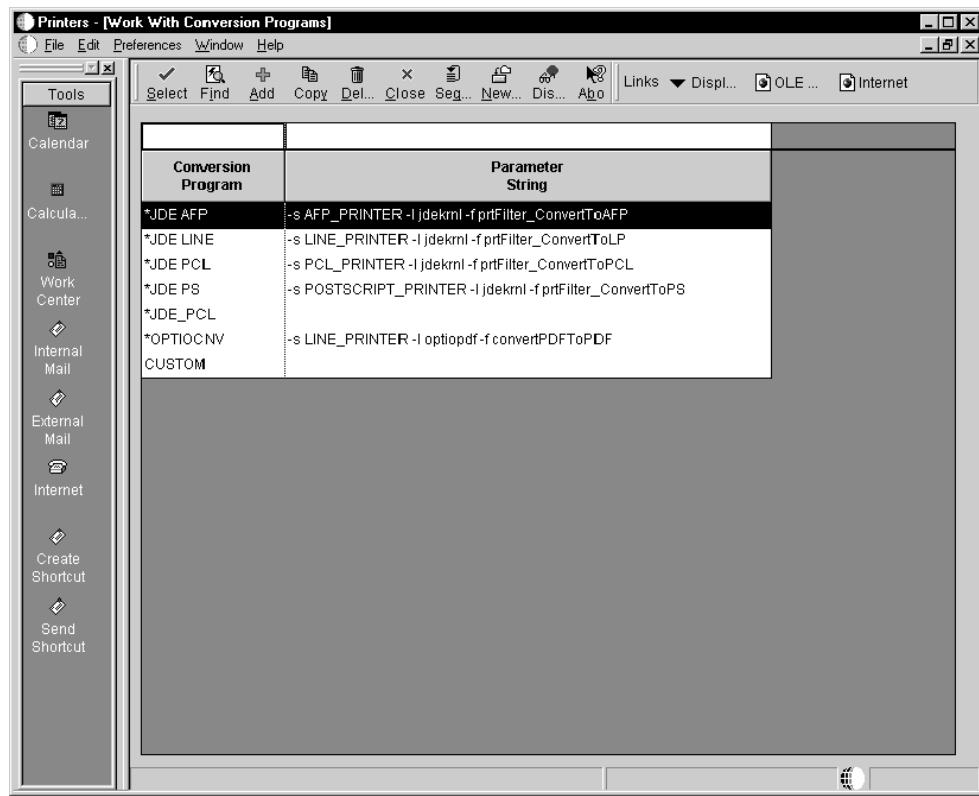
Note:

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.

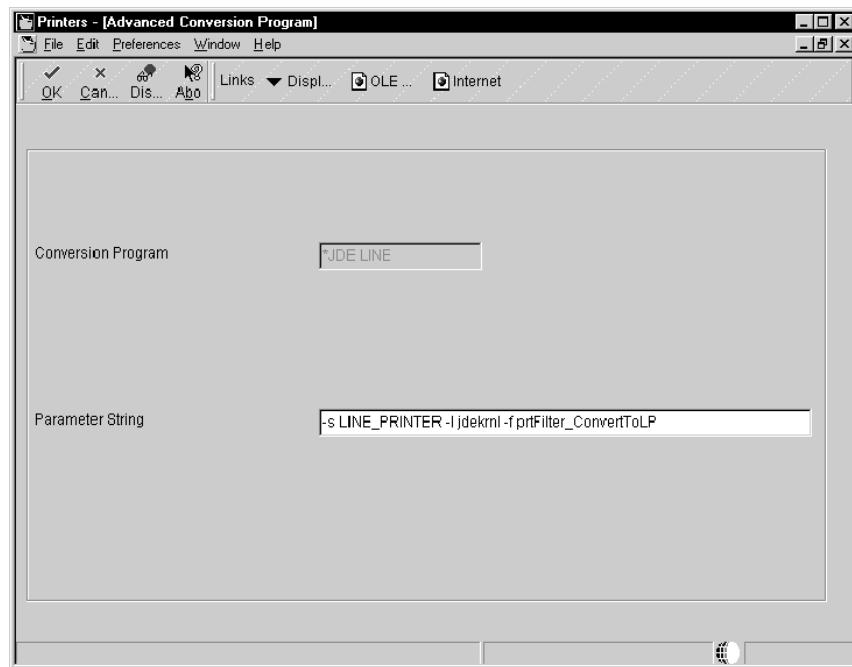
The Work With Conversion Programs form appears.

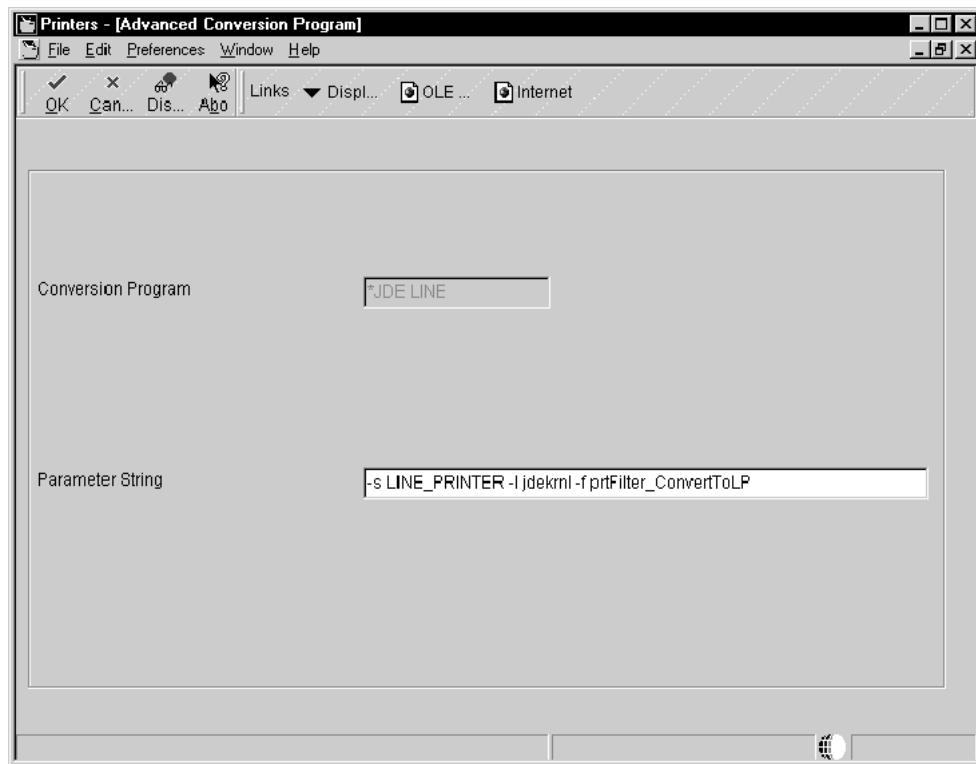




- Either click Add, or choose one of the filters and click either Copy or Select.

The Advanced Conversion Program form appears.





11. 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 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.

- To send a PDF file directly to a printer without converting it, enter the following parameter string:

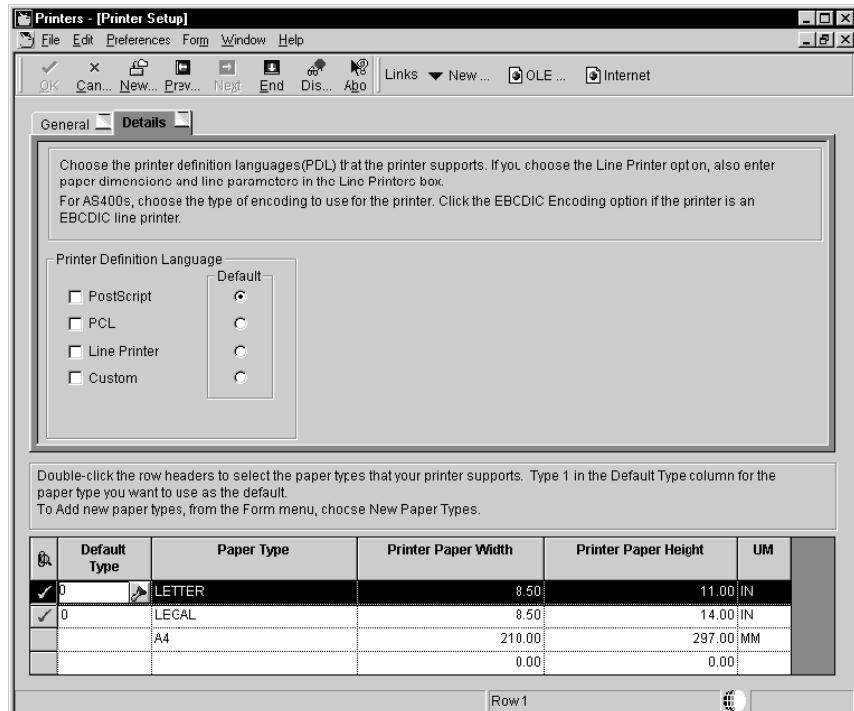
`-s script_name`

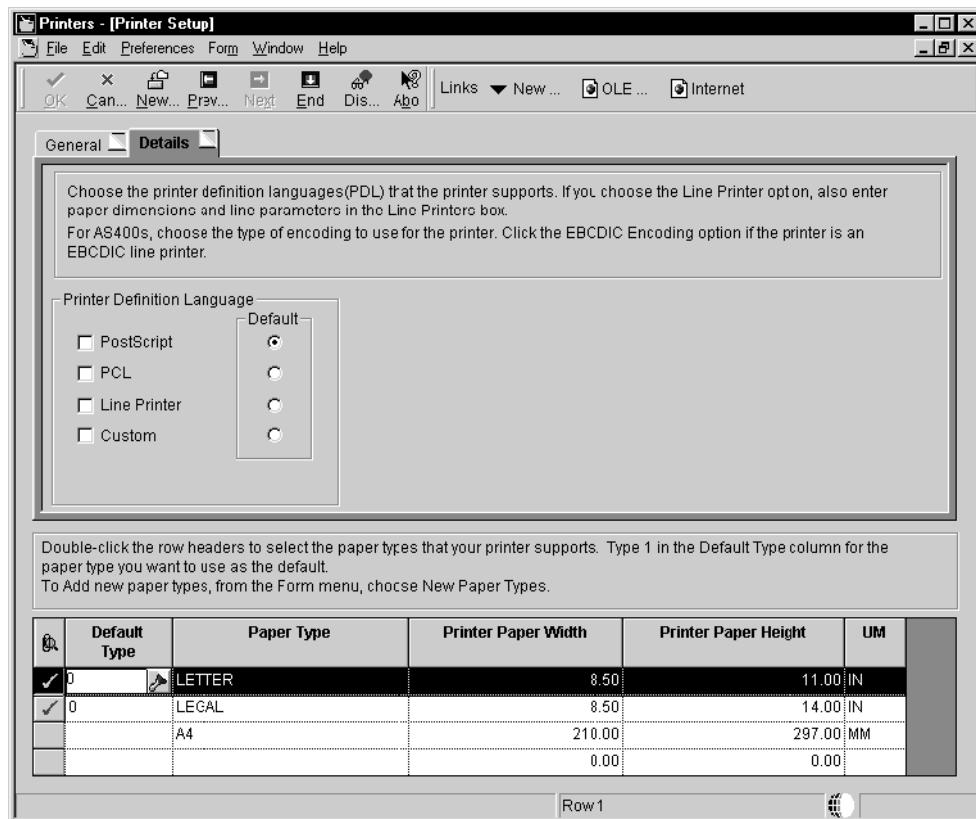
where `script_name` is the name of a shell script that sends the PDF to a UNIX queue (such as the `PCL_PRINTER` script). Because the file is not being converted, the `-l` and `-f` parameters are not required.

12. 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.

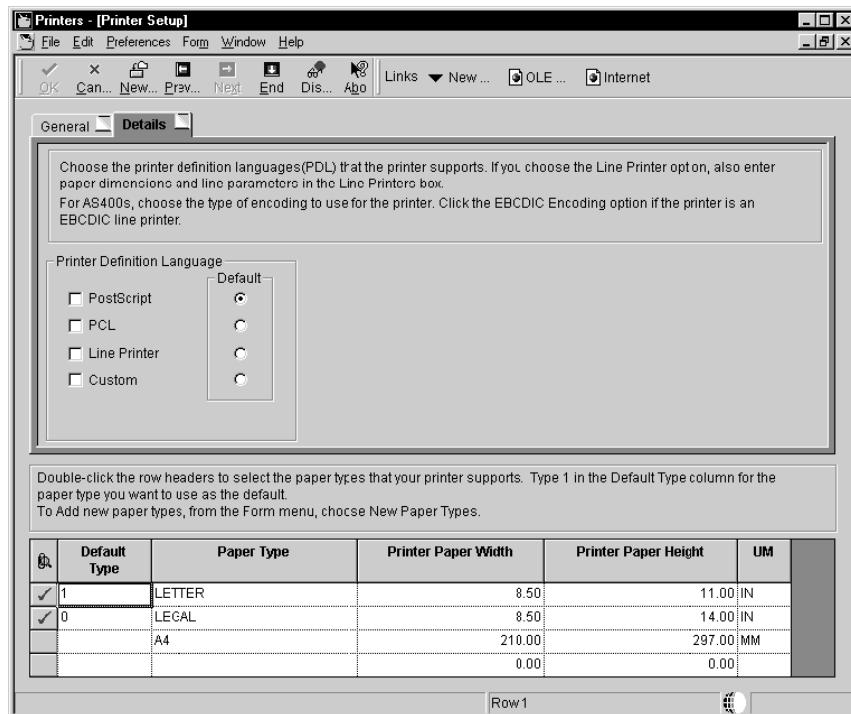
Note:

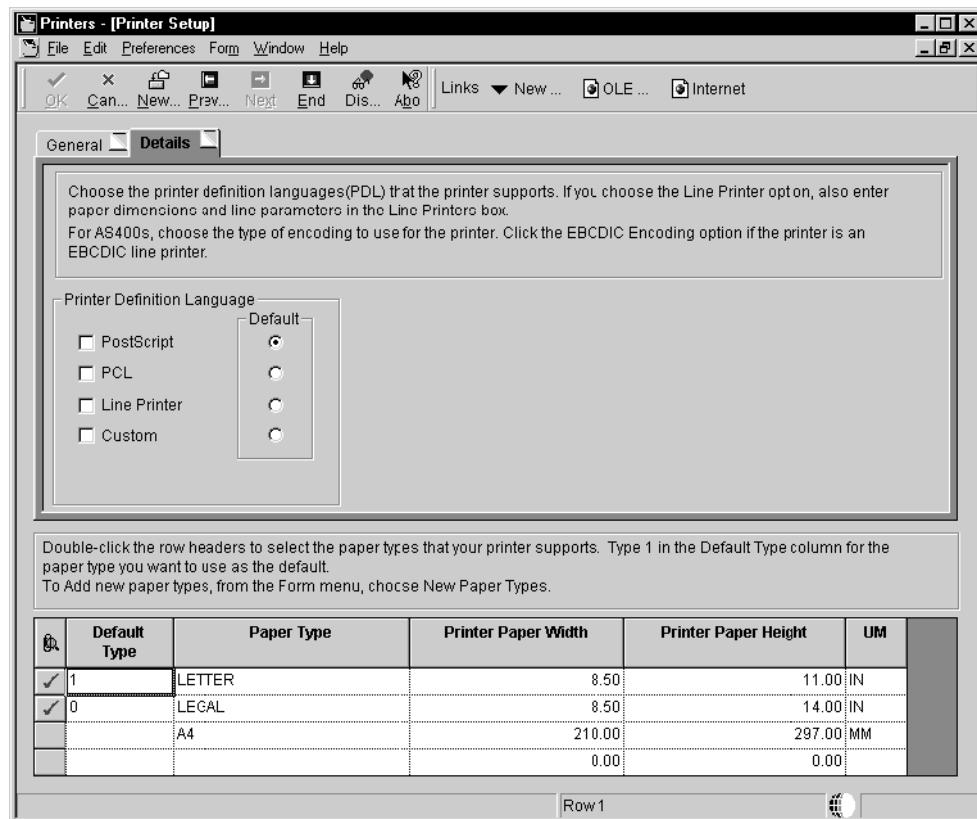
You can add new paper types as necessary. Instructions to do so are included later in this task.





13. 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.





14. To add a new paper type, do the following:

- From the Form menu, choose New Paper Type.

The Work With Paper Types form appears.

Paper Type	Paper Height	Paper Width	UM	Description
A4	297.00	210.00	MM	Millimeters
CUSTOM	2.00	20.00	IN	Inches
LEGAL	14.00	8.50	IN	Inches
LETTER	11.00	8.50	IN	Inches

Printers - [Work With Paper Types]

This screenshot shows a software application window titled "Printers - [Work With Paper Types]". The menu bar includes File, Edit, Preferences, Window, and Help. Below the menu is a toolbar with icons for Select, Find, Add, Del..., Close, Seg..., New..., Dis..., and Abo. To the right of the toolbar are Links, Disp..., OLE..., and Internet buttons. The main area contains a table with the following data:

Paper Type	Paper Height	Paper Width	UM	Description
A4	297.00	210.00	MM	Millimeters
CUSTOM	2.00	20.00	IN	Inches
LEGAL	14.00	8.50	IN	Inches
LETTER	11.00	8.50	IN	Inches

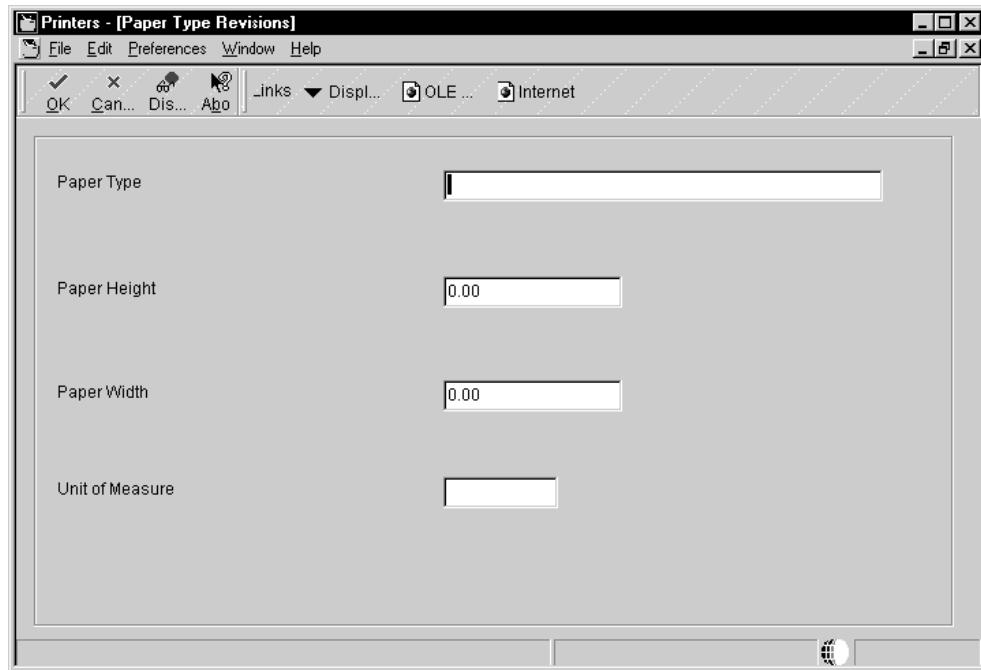
- Click Add.

The Paper Type Revisions form appears.

Printers - [Paper Type Revisions]

This screenshot shows a software application window titled "Printers - [Paper Type Revisions]". The menu bar includes File, Edit, Preferences, Window, and Help. Below the menu is a toolbar with OK, Cancel, Dis..., and Abo buttons. To the right of the toolbar are Links, Disp..., OLE..., and Internet buttons. The main area contains four input fields:

- Paper Type: A text input field containing the value "I".
- Paper Height: A text input field containing the value "0.00".
- Paper Width: A text input field containing the value "0.00".
- Unit of Measure: A text input field containing an empty string.



15. Complete the following fields, and click OK:

- Paper Type
- Paper Height
- Paper Width
- UM

ERP 8.0 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 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.

16. When you finish entering information for the printer, click End.

ERP 8.0 saves the new printer and displays the Printer form.

Field Descriptions

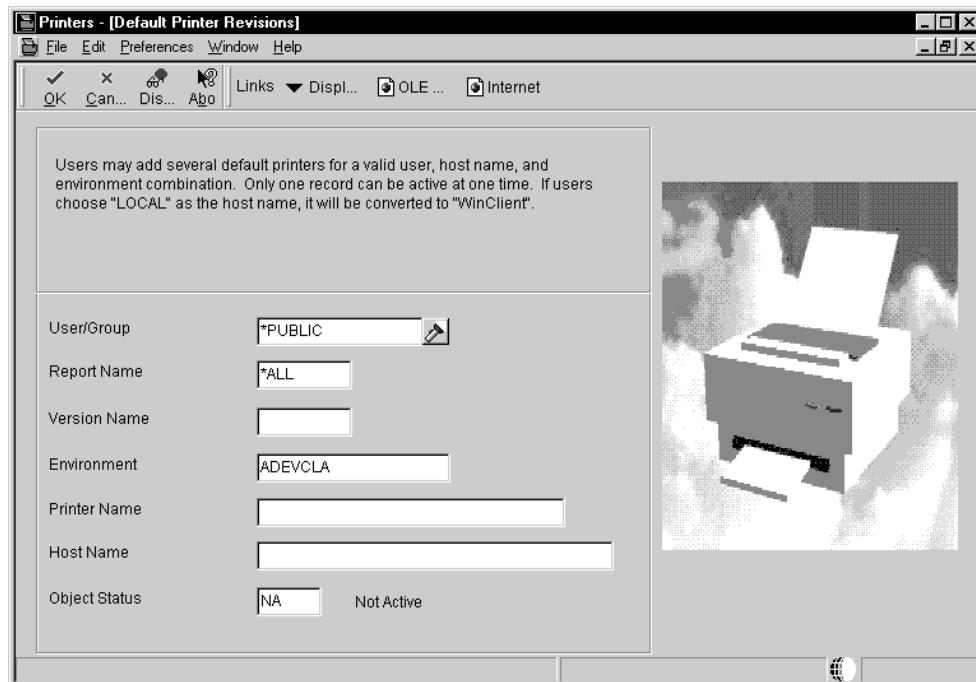
Description	Glossary
Platform Type	The type of physical hardware the database resides on.
Description	Glossary
Printer Name	The name assigned to a specific printer on a network, such as Accounting_Printer_1. For OneWorld, this name cannot contain a space character, even if allowed by your operating system.
Description	Glossary
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
Description	Glossary
Paper Type	The size of paper the printer supports, such as letter, legal, or A4 --- FORM SPECIFIC --- The sizes of paper the printer will support, such as letter, legal, and A4.
Description	Glossary
Printer 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.
Description	Glossary
Printer 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.
Description	Glossary
UM	A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).
Description	Glossary
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
Description	Glossary
Columns Per Page	A line printer parameter that specifies the number of columns per page. For example, 80 or 132.
Description	Glossary
Characters Per Inch	The horizontal printing density. Enter the number of characters per inch supported by your printer.
Description	Glossary

Line Per Page	A line printer parameter that specifies the number of lines per page. For example, 60 or 66.
Description	Glossary
Line Per Inch	<p>The line spacing should be entered as the number of lines per inch and must be supported by your printer. The valid values are:</p> <ul style="list-style-type: none"> 4 IBM 5219, 5224, 5225, and 3287 printers only 6 IBM 5224 printer only 8 IBM 5224 printer only 9 IBM 5225 printer only <p>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.</p>

► 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

ERP 8.0 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 specified 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.

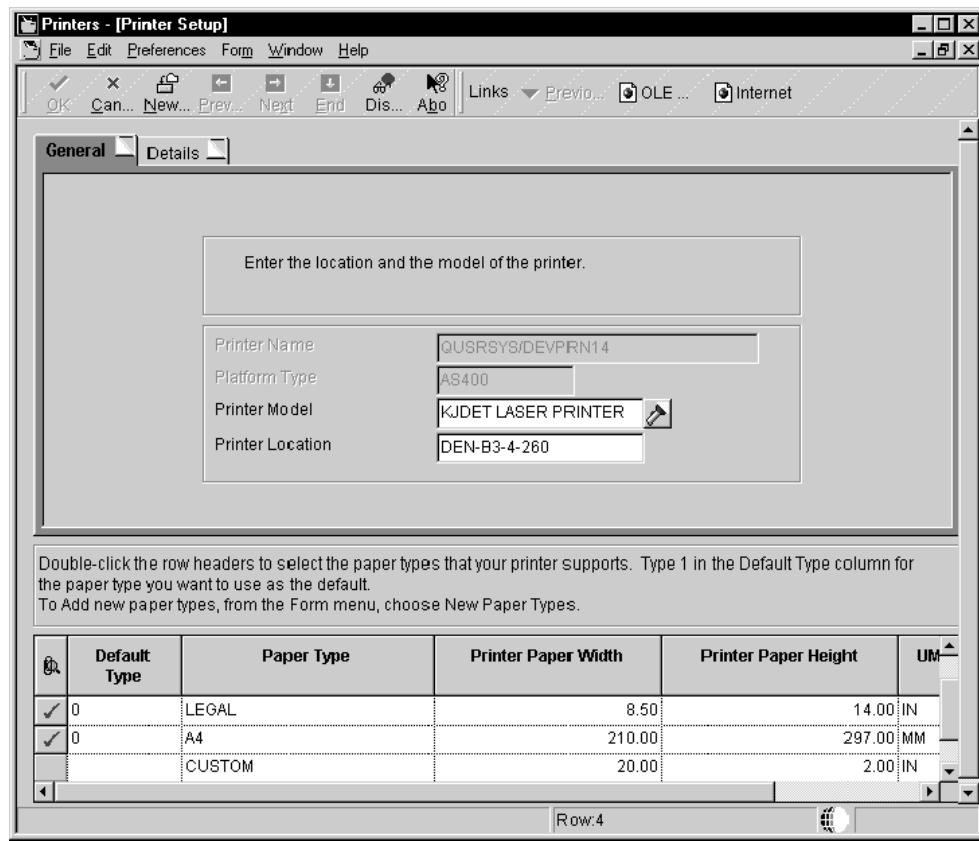
Printers - [Work With Printers]

This screenshot shows a Windows-style application window titled "Printers - [Work With Printers]". The menu bar includes File, Edit, Preferences, Window, Help, and several toolbar icons. Below the toolbar is a menu bar with Select, Find, Copy, Del..., Close, Seg..., New..., Dis..., Abo, Links, Disp..., OLE..., and Internet. The main area is a table listing printer definitions:

Printer Name	Default Printer Definition Language	Platform Type	Printer Model
D/D6262	*JDE LINE	AS400	IBM 6262
QGPLDEVDES3A	*JDE PS	AS400	LASER
QGPLDEVPRN10	*JDE LINE	AS400	LINE PRINTER
QGPLDEVPRN24	*JDE PS	AS400	IBM INFOPRINT
QGPLLEXLINE	*JDE LINE	AS400	AS/400 LINE
QUSRSYS/D6262	*JDE LINE	AS400	IBM 6262
QUSRSYS/DEVPRN14	*JDE PS	AS400	HP DESKJDET LASER PRIN
QUSRSYS/DEVPRN15	*JDE LINE	AS400	HP DESKJDET LASER PRIN
QUSRSYS/DEVPRN16	*JDE LINE	AS400	HP DESKJDET LASER PRIN
QUSRSYS/DEVPRN18	*JDE LINE	AS400	HP DESKJDET LASER PRIN
QUSRSYS/DEVPRN21	*JDE PS	AS400	LEXMARK LASER
QUSRSYS/DEVPRN24	*JDE PCL	AS400	IBM INFOPRINT
QUSRSYS/JM952458	*JDE PCL	AS400	LEXMARK OPTRA 82455
QUSRSYS/LASERU7	*JDE PS	AS400	HP DESKJDET LASER PRIN
QUSRSYS/QPRINTD	*JDE LINE	AS400	IBM 6262
TEST/AWAY	*JDE PS	AS400	AS/400 EBCDIC LASER
TEST/TEST1	*JDE PS	AS400	APPLE LASER

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.

ERP 8.0 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 corpnts1, the printer name for a Windows NT printer would be: \\corpnts1\docprf2. If you use multiple platforms, you must define a printer for each platform, using the following naming conventions:

- **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: \\corptrs1\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 ERP 8.0.

► **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 ERP 8.0 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 ERP 8.0.
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 ERP 8.0 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 ERP 8.0.

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 ERP 8.0 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, the jde.ini settings differ slightly, depending on the platform that you use. 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/jdedwardsnewworld/output  
Example path: /usr/jdedwardsnewworld/output/PrintQueue
```

- Windows NT Server

```
[ INSTALL ]  
B733=d:\jdedwardsnewworld\output  
Example path: d:\jdedwardsnewworld\output\PrintQueue
```

The default directory for your log files is PrintQueue, which becomes a subdirectory to the directory that you designate in the [INSTALL] section of the jde.ini file. You can change the location of this directory as necessary.

Note:

These jde.ini settings also determine where your report output resides after processing. If you set your jde.ini to save the output for your reports, ERP 8.0 saves a PDF file for the report in the report output directory.

► 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 jddebug.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.

Setting Up a ERP 8.0 Printer to Use a Barcode Font

ERP 8.0 supports the use of the BC C39 3 to 1 Medium barcode font. J.D. Edwards includes this barcode font with ERP 8.0. After you set up your ERP 8.0 printers, you can assign a printer to use a barcode font for your reports.

Note:

ERP 8.0 printers that support barcodes must use either the PostScript or PCL printer definition languages.

► To set up a ERP 8.0 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 ERP 8.0 printers.

- Printer Definition Language

Choose the appropriate option, depending on the printer definition language of the printer in the Printer Name field.

- True Type Font Name

Click this button to select the true type barcode font BC C39 3 to 1 Medium on the Font form.

- Printer Font Name

- Symbol Set ID

(PCL only). 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.

ERP 8.0 saves the information and clears the revision form. You can continue to enter information for other ERP 8.0 printers that support barcodes, or click Cancel to exit the form.

► **To modify ERP 8.0 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.

ERP 8.0 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 ERP 8.0 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.

ERP 8.0 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 ERP 8.0 printer**

1. On the Printers menu (GH9013), choose Bar Code Support (P986166).
2. On the Work with Bar Code Font form, click Find.
ERP 8.0 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 ERP 8.0 Line Printers

When you run a report on a line printer in ERP 8.0, 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, width of the fields on the report, paper dimensions, and line parameters.

This section provides the information necessary to create ERP 8.0 line printer reports.

Important:

The information in this section is intended for users with previous experience creating ERP 8.0 reports and setting up ERP 8.0 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 ERP 8.0 Reports* in this guide
- *ERP 8.0 Server and Workstation Administration Guide* for information on setting up printers on AS/400, UNIX, and Windows NT servers.

► **To design a ERP 8.0 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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 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.

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
- 05** Add
- 06** Copy
- 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)
- 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 -> 21 -> 26 -> 28 -> 38 -> 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

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 Location
- To Location

These fields list the From and To (Transfer) Locations specified for the corresponding From and To project statuses.

- From Release
- To Release
- From and To (Project Software) Releases

These fields list the From and To Releases for the corresponding From and To project statuses.

- Allowed 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

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:

11>21>26>28>38>01

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:

11>40>41>42>01

where

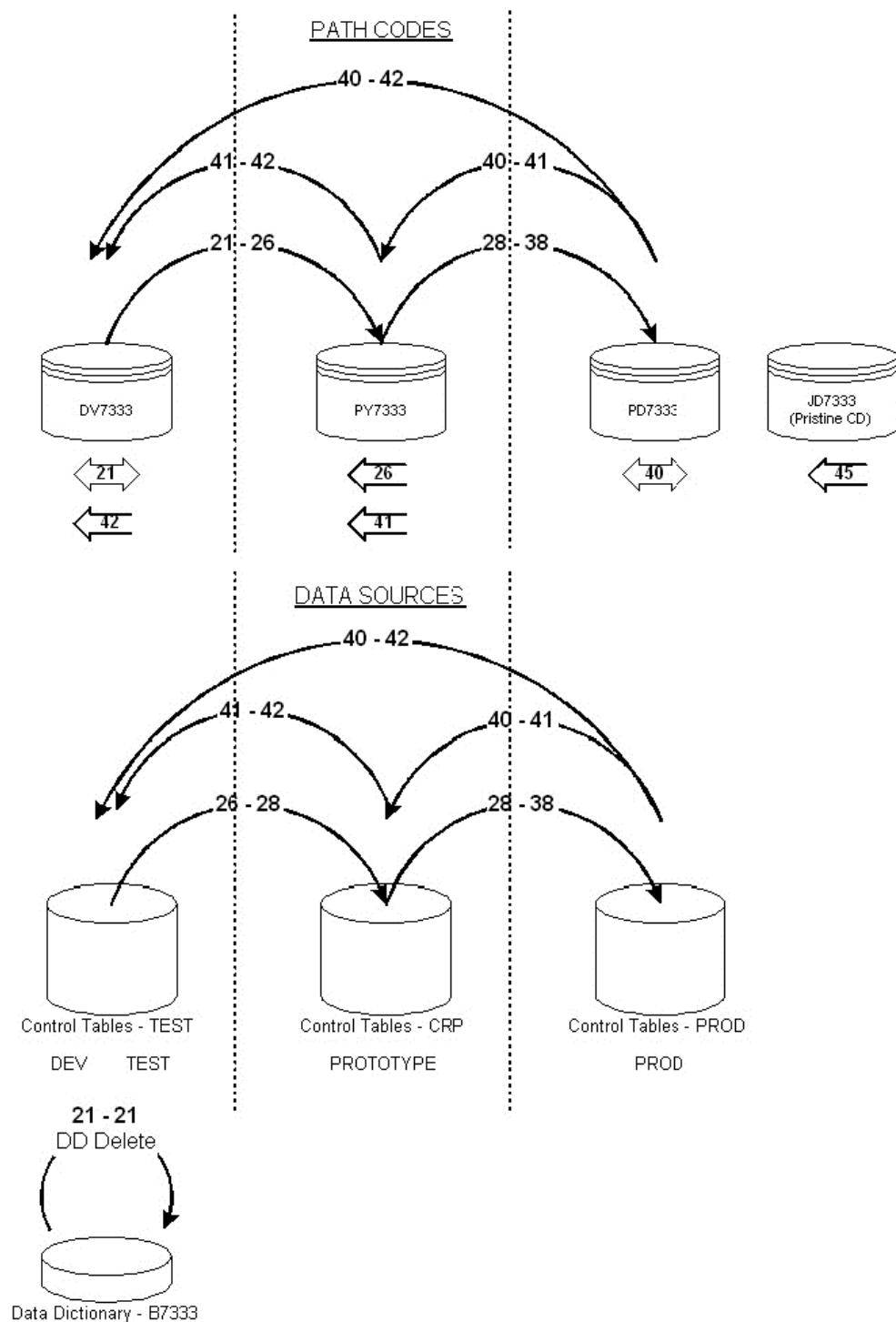
- 11=Newproject pending review
- 40=Production development
- 41=Transfer from Production to Prototype
- 42=Transfer from Prototype to Development

- 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.

Illustration of the Project Promotion Life Cycle



Work with Servers

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
- ERP 8.0 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 ERP 8.0 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 ERP 8.0 subsystems. In addition, you can view the status of ERP 8.0 subsystems that are running or are waiting to process jobs.

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 ERP 8.0 server. Similarly, using the Submitted Reports applications, workstation users can generally control only those jobs submitted by them.

You should use ERP 8.0 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 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:

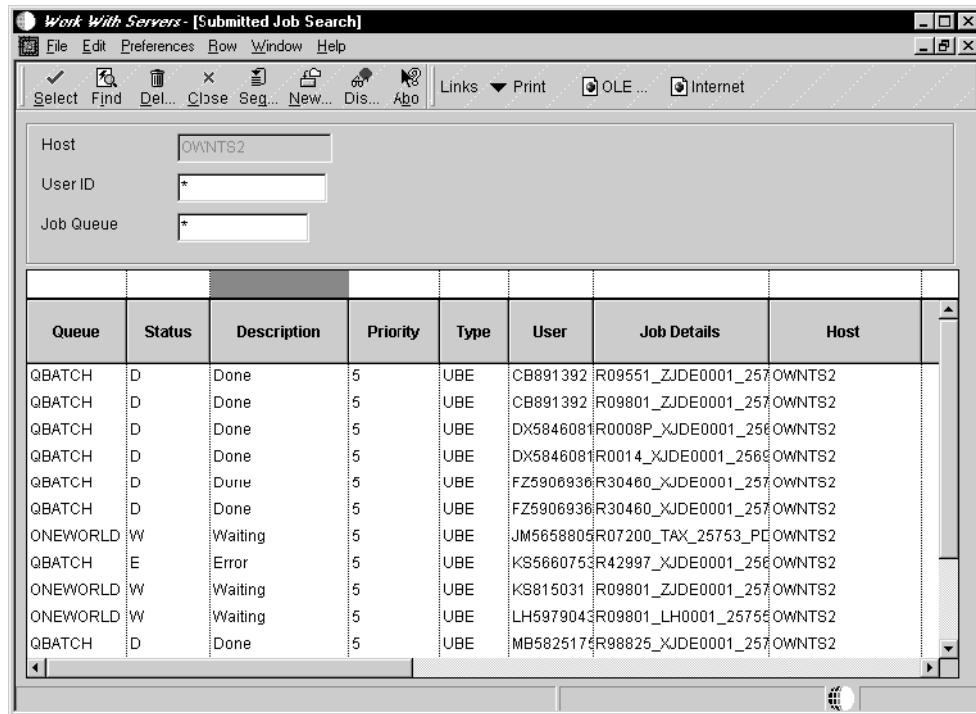
- User ID

The default user ID is the user signed onto the current ERP 8.0 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

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.
6. 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, ERP 8.0 also creates a PDF file for the report in the following directory on your workstation:

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 jddebug.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 ERP 8.0 processing. The jde.log tracks any fault that might occur within ERP 8.0 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 jddebug.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 jddebug.log to track errors. Instead, it uses this log to track the timing of ERP 8.0 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 jddebug.log.
6. Click OK to view the logs.

Note:

If you choose both the jde.log and the jddebug.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.

For information about a processing option, right-click the processing option field and choose What's This from the menu. Or, click the processing option field and press F1.

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.

Managing ERP 8.0 Queues

Each ERP 8.0 server instance starts a queue kernel process that manages batch processes across operating system platforms. The process keeps track of all jobs that are submitted and controls the order in which the jobs run.

ERP 8.0 uses two tables to maintain queue records:

- F986110 table (Job Control Status Master), which maintains records on the status of each job submitted to a queue.
- F986130 table (Queue Control Status Master), which stores the names of each queue, such as QBATCH, the name of the server on which the queue runs, the port number for the server instance, the queue status and type, and the maximum number of active jobs allowed.

Note:

The F986130 is a system table that is new with the ERP 8.0 B9 release. Be sure to account for it when you map objects using Object Configuration Manager (OCM).

For more information on working with OCM, see Working with the Object Configuration Manager in the Configurable Network Computing Implementation guide.

The following points provide a summary of how ERP 8.0, using the queue kernel, manages a UBE that you launch:

- Starts queue kernel when the server instance starts
- Verifies that a record exists in the F986130 table for the queue to which the job is submitted or, if the job is intended for a non-ERP 8.0 queue, verifies that the native queue (i.e., AS/400) exists
- Inserts job record into the F986110 table
- Sends a message to the queue kernel that there is a new job
- Adds the job to a wait list
- Schedules the job or submits it to the native queue
- Starts the job
- Runs the job
- Updates the job record in the F986110 table upon receiving a message from the UBE process that the job is complete
- Removes the job from the list of active jobs
- Schedules another job

The queue kernel also follows a subroutine in scheduling jobs. The following points summarize the subroutine the queue kernel follows:

- Verifies that there are jobs in the queue waiting to be run
- Verifies that the number of jobs waiting to be run is less than the maximum number of jobs allowed for the queue
- Takes the highest-priority job from the wait list and updates its status to S (submitted)
- Removes the job from the wait list and adds it to the active list

A ERP 8.0 application, Work with Job Queues (P986130), allows you to dynamically administrate queues. You can use this application to create, modify, copy, delete, or change the status of job queues, regardless of platform.

You can also administer queue information contained in job versions, using the Work with Batch Versions – Available Versions application (P98305). For example, you can change the queue to which a job is submitted on a server.

See Also

- Working with Server Jobs* for information on using the Work with Servers application (P986116) to administer UBEs.

Administering Queues

You use the Work with Job Queues application (P986130) to define and manage queues. For example, you can use this application to add a queue record to the Queue Control Status Master table (F986130). You can also revise an existing queue record. For example, you might want to change the maximum number of jobs that can run in a queue. You can copy a queue to another server. Finally, you can dynamically administer a queue by changing its status.

Before You Begin

- ❑ To activate the queue kernel, make sure you have the following settings in the server's jde.ini file:

```
[JDENET_KERNEL_DEF14]  
krnlName=QUEUE KERNEL  
dispatchDLLName=jdekrl.dll  
dispatchDLLFunction=_DispatchQueueMessage@28  
maxNumberOfProcesses=1  
numberOfAutoStartProcesses=0
```

```
[DEBUG]  
QKLog=0
```

where a value of 0 means that only an error log is generated. You can change the setting to 1 if you need to generate debug logs for troubleshooting purposes.

```
[NETWORK QUEUE SETTINGS]  
QKActive=1  
QKOnIdle=300
```

where a value of 1 means that the queue kernel is active and a value of 300 sets the queue kernel on idle time to 300 seconds.

- ❑ Add the following setting to the client jde.ini file:

```
[NETWORK QUEUE SETTINGS]  
QKActive=1
```

► To add a queue

1. On the Batch Processing Setup menu (GH9013), choose Work with Job Queues (P986130).

The Work with Job Queues form appears.

2. Click Add.

The Job Queue Revisions form appears.

3. In the Job Queue Revisions form, complete the following fields and click OK:

- Host

Enter the name of the server on which the queue will run.

- Job Queue

Enter the name of the queue.

- Job Queue Status
Enter either a 01, if you want the queue to be active, or 02, if you want the queue to be inactive.
- Queue Type
Define here whether the queue is a ERP 8.0 queue or a non-ERP 8.0 queue.
Non-ERP 8.0 queues work only on the AS/400 server.
- Maximum Batch Jobs
Define the maximum number of jobs that can run in the queue.
- Port Number
Identify the port number for the server instance on which the queue will run.
- Default Queue
Enter 01 for the default queue or 02 for a non-default queue.

► To revise a queue

1. On the Batch Processing Setup menu (GH9013), choose Work with Job Queues (P986130).
The Work with Job Queues form appears.
2. Find the queue that you want to revise and click Select.
The Job Queue Revisions form appears.
3. Complete any of the following fields to make necessary revisions to the queue and click OK:
 - Host
 - Job Queue
 - Job Queue Status
 - Queue Type
 - Maximum Batch Jobs
 - Port Number
 - Default Queue

► To copy a queue

1. On the Batch Processing Setup menu (GH9013), choose Work with Job Queues (P986130).
2. Find the queue that you want to copy and click Copy.
The Job Queue Revisions form appears.
3. Complete any of the following fields to copy the queue and click OK:
 - Host
 - Job Queue

- Job Queue Status
- Queue Type
- Maximum Batch Jobs
- Port Number
- Default Queue

► To change the status of a queue

1. On the Batch Processing Setup menu (GH9013), choose Work with Job Queues (P986130).
2. Find the queue whose status you want to change.
3. From the Row menu, choose Change Status.

ERP 8.0 changes the status of the queue, either from Active to Inactive or from Inactive to Active, depending on its prior status.

Overriding a Job Queue

When you prepare to submit a UBE, you can change the values of the parameters that define the submission by overriding the job queue. Overriding the job queue means that you change the job queue to which the job is submitted on the server.

To override the job queue for a batch version, you launch the Batch Versions application (P98305), choose a batch version, and access the Advanced Version Prompting form (W98305I). The override queue must be one that is available for the server and port.

In working with the Advanced Version Prompting form, you can override the job queue only if the queue kernel is active *and* if the batch version is mapped to run on the server. If the batch version is mapped to run locally, you cannot override the job queue, even if the queue kernel is active, unless you choose the Override Location option.

Note:

Overriding the job location means that you change the machine that will run the UBE. For example, a UBE might run locally by default. You can override the processing location to a server, and the UBE will run on the server. Conversely, you change the processing location from a server to a workstation.

ERP 8.0 displays a Verify Overriding the Job Queue form if the job runs locally and you do not override the processing location.

The status of the queue kernel and the default processing location for the UBE determine the way the Override Job Queue option appears in the Advanced Version Prompting form. The following table summarizes the queue kernel status and processing location combinations that can occur and the effect each combination has on the Override Job Queue option:

Queue Kernel Status	UBE Processing Location	Status of Job Queue Override Option
Inactive	Local or server	Not visible
Active	Local	Visible but disabled

Active	Local, but Override Location option chosen	Enabled
Active	Server	Enabled

► To override a job queue

1. On the System Administration Tools menu (GH9011), choose Batch Versions (P98305).
The Work with Batch Versions – Available Versions form appears.
 2. Find a version of a job that you want to submit and click Select.
The Version Prompting form appears.
 3. From the Form menu, choose Advanced.
The Advanced Version Prompting form appears.
 4. Choose the Override Job Queue option and click OK.
-

Note:

If the queue kernel is not active, this option is not visible.

5. In the Version Prompting form, choose either, both, or neither of the following options and click Submit:
 - Data Selection
 - Data Sequencing
 The Job Queue Search form appears.
6. Find the name of an available queue for the host and port name.
7. Choose the queue you want to override to and click Select.
8. Complete the data selection and sequencing and processing options required to submit the job and choose a printer if necessary.

Working with ERP 8.0 Subsystems

ERP 8.0 uses various subsystems to offload processing from the enterprise server.

Understanding ERP 8.0 Subsystems

Subsystems are continuously running batch jobs that run independently of ERP 8.0 applications. Some ERP 8.0 applications use subsystems to complete needed work. You must manually start ERP 8.0 subsystems to minimize the consumption of system resources.

What Are ERP 8.0 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 ERP 8.0 or other application jobs.

For UNIX, a ERP 8.0 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 ERP 8.0, subsystems are defined as continuously running batch jobs that run independently of, and asynchronously with, ERP 8.0 applications. These ERP 8.0 subsystem jobs function within the operating system's logical process or queue defined for the server platform. You can configure ERP 8.0 to use one or more subsystems. See *Defining Subsystem Jobs* in the *Tools Guide*.

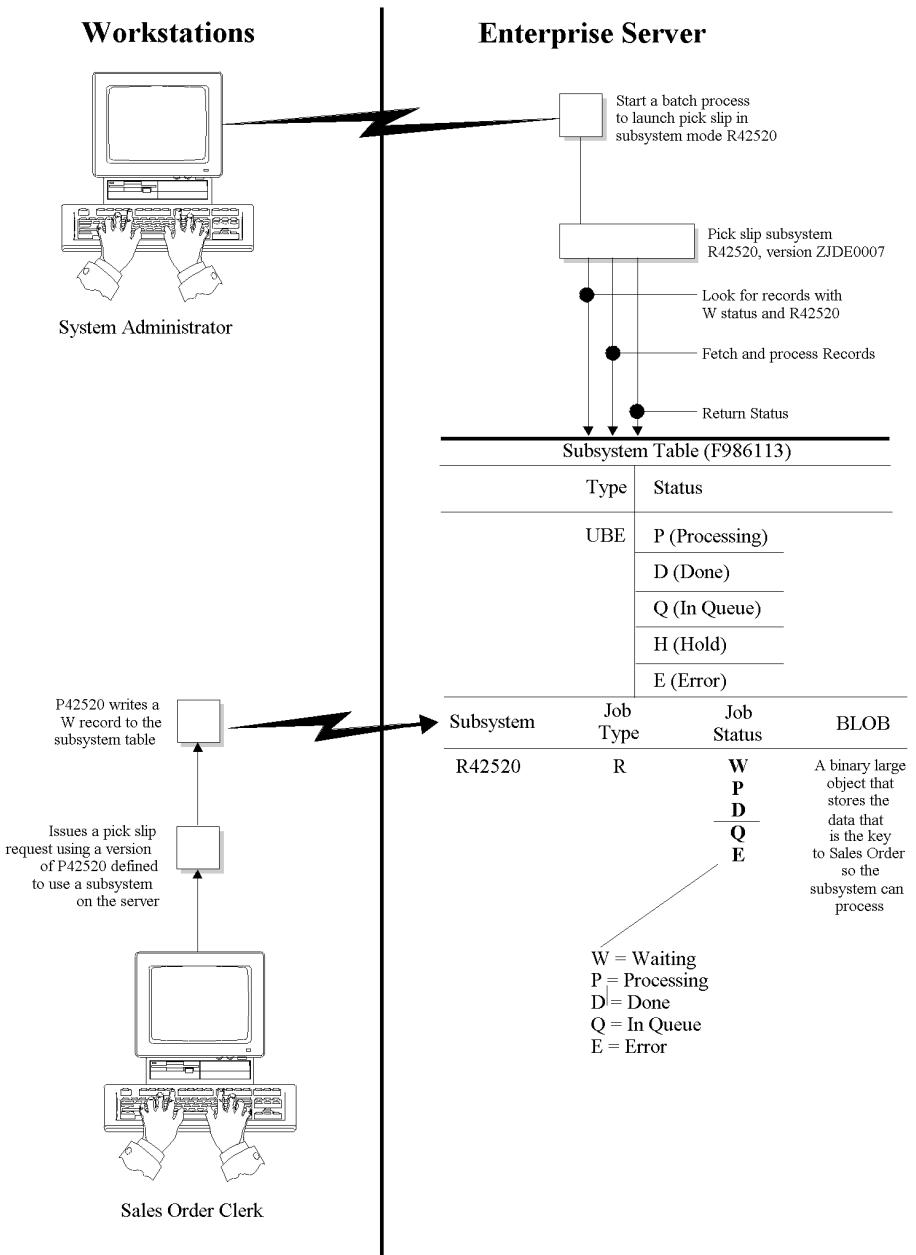
How Does ERP 8.0 Use Subsystems?

Some ERP 8.0 applications are designed to use subsystems. For example, you can instruct Sales Order Processing to print pick slips through a ERP 8.0 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, ERP 8.0 subsystems run continuously looking for and processing requests from ERP 8.0 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 ERP 8.0 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 ERP 8.0 subsystem to process the record without additional interaction with the requesting application. The continuously running ERP 8.0 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 ERP 8.0 Subsystems Enabled?

To prevent excessive processing overhead during server startup and to prevent unnecessary uses of processor resources for ERP 8.0 subsystem jobs that might be in use, you must manually start ERP 8.0 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 ERP 8.0 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)	<p>There is one AS/400 subsystem that is used for ERP 8.0. This subsystem is automatically started when you issue the ERP 8.0 startup command STRNET. The subsystem name is version-specific. For example, for release B73.1 the subsystem name is JDEB731.</p> <p>To process requests destined for ERP 8.0 subsystems, you must define a specific job queue running under the JDENET subsystem. For example, a job queue might be named QBATCH.</p> <p>User requests for ERP 8.0 subsystem-defined batch jobs are executed by the job queue based upon definition in the AS/400 user profile.</p> <p>See <i>Understanding Batch Process Administration for AS/400</i>.</p>
UNIX (jdequeue)	<p>There can be one or more queues for ERP 8.0. These queues can be named the same or differently. You define queues by parameters in the startup shell script RunOneWorld.sh.</p> <p>To process requests destined for ERP 8.0 subsystems, you must define one or more queues. For example, a jdequeue might be named QBATCH.</p> <p>User requests for ERP 8.0 subsystem-defined batch jobs are executed by the job queue, based upon their process ID.</p> <p>See <i>Understanding Batch Process Administration for UNIX</i>.</p>
NT (jde.ini settings)	<p>There can be one or more queues for ERP 8.0. These queues must have the same name. You define queues by settings in the jde.ini file.</p> <p>To process requests destined for ERP 8.0 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.</p> <p>User requests for ERP 8.0 subsystem-defined batch jobs are executed by the job queue, based upon their process ID.</p> <p>See <i>Understanding Batch Process Administration for NT</i>.</p>

System administrators can display all ERP 8.0 subsystems running on a server by using the Work with Server Jobs application (P986113). Use this application to:

- Locate a list of ERP 8.0 subsystems running on a server
- Locate a list of ERP 8.0 subsystem records that are unprocessed (not available for AS/400 servers)
- Locate the current record that a ERP 8.0 subsystem is processing (not available for AS/400 servers)
- Stop or delete any ERP 8.0 subsystem

Locating ERP 8.0 Subsystems Running on a Server

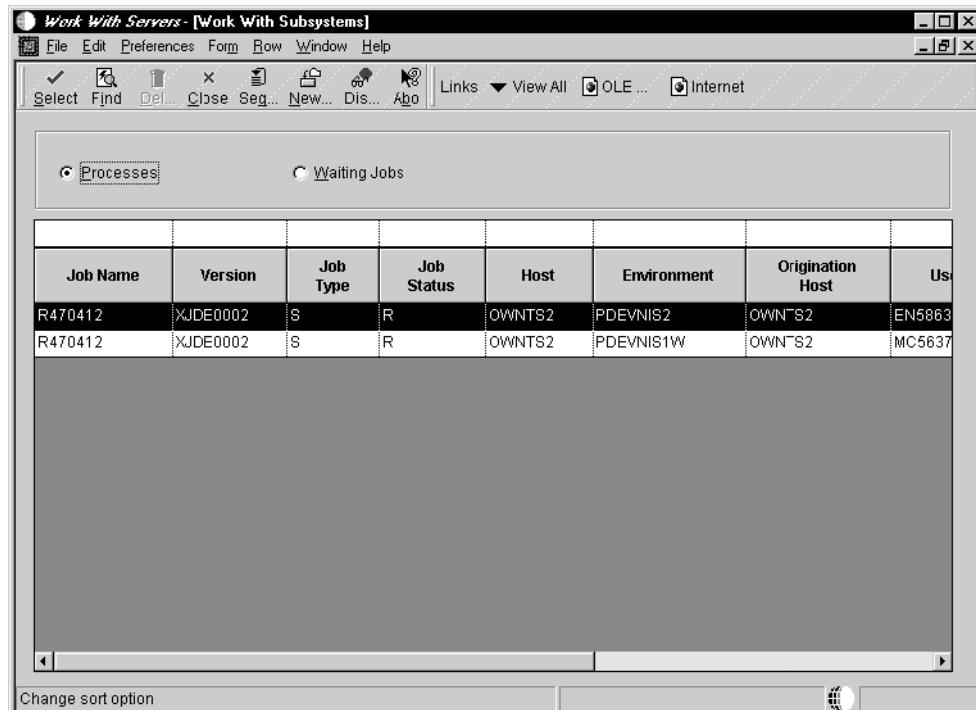
You can use Work With Servers to determine which ERP 8.0 subsystems are currently running or waiting on a particular server. The running subsystems are identified by report number and version.

► To locate ERP 8.0 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:

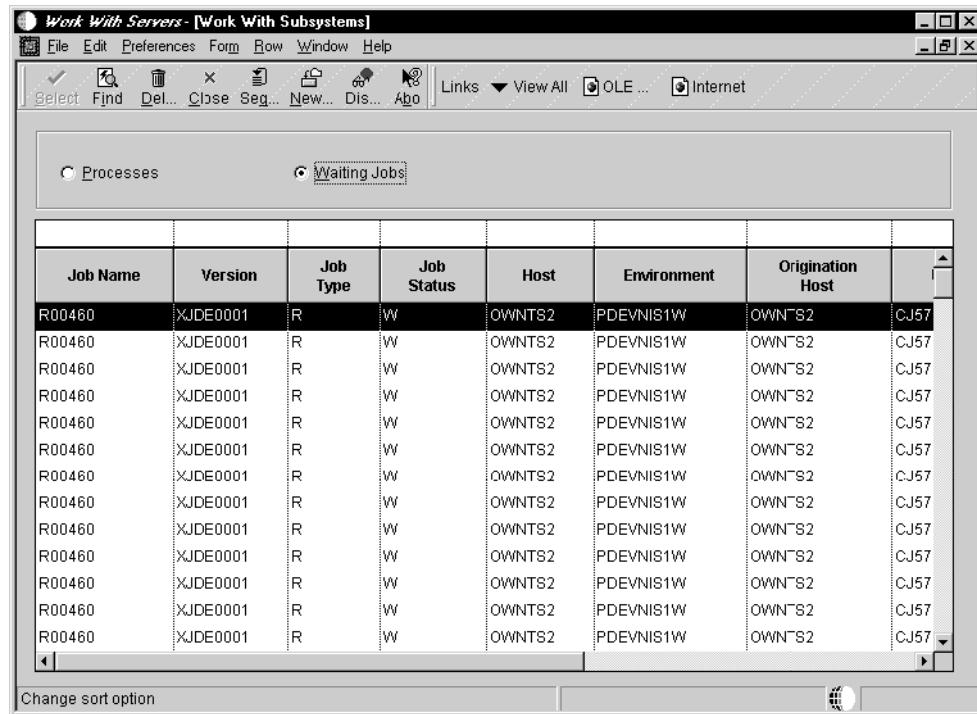
- &Processes

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 ERP 8.0 subsystems are displayed. The status of each subsystem is shown by codes in the following fields:

- Job Type

This field indicates whether the status is a subsystem record or a subsystem job. Valid values are:

- R, or subsystem record
- S, or subsystem job

Description

Glossary

Code

A list of valid codes for a specific user defined code list.

Description

Glossary

Description

A user defined name or remark

- Job Status

This field indicates whether the status is a subsystem job or record. Valid values are:

- W, or subsystem record waiting
- P, or subsystem record processing
- E, or subsystem record to end the job
- R, or subsystem job running

Description	Glossary
Code	A list of valid codes for a specific user defined code list.
Description	Glossary
Description	A user defined name or remark

Reviewing Job Records for ERP 8.0 Subsystems

Different ERP 8.0 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.

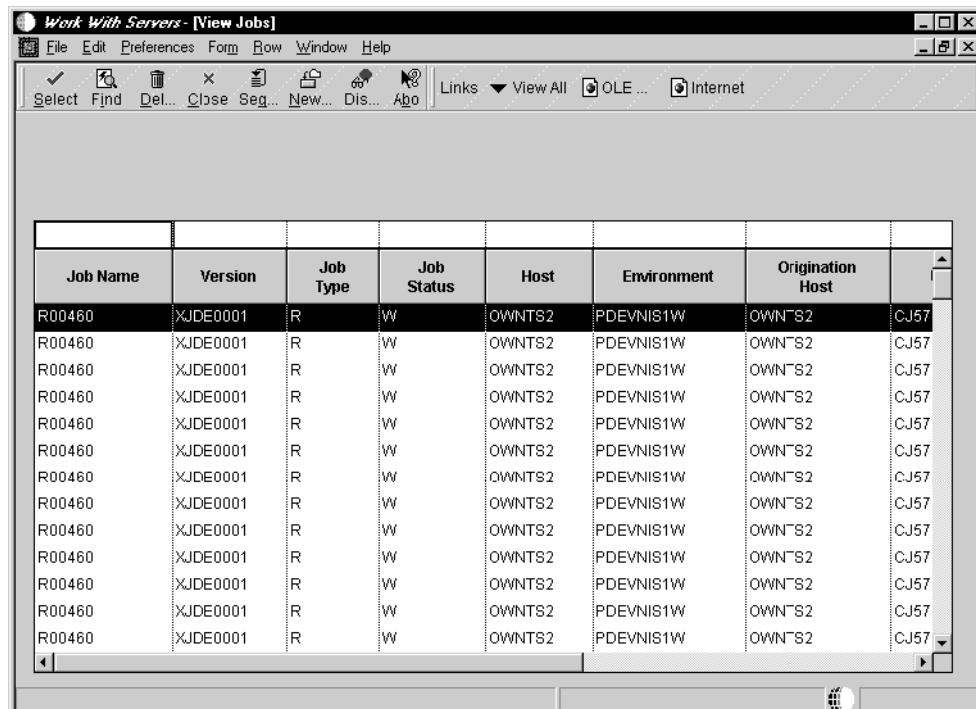
Before You Begin

- Locate a ERP 8.0 subsystem job. See [Locating ERP 8.0 Subsystems Running on a Server](#).

► To view job records for ERP 8.0 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 ERP 8.0 Subsystems

You can use Work With Server Jobs to terminate ERP 8.0 subsystems. Two methods of termination are available:

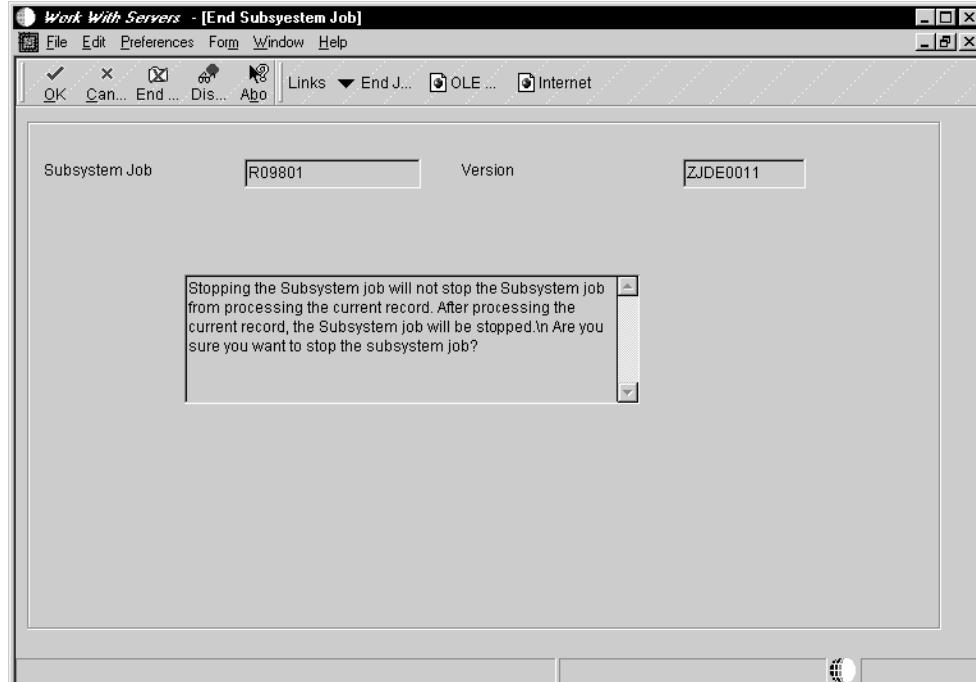
- **Stopping a subsystem job causes it to terminate after it completes processing the current record. Additional unprocessed records in the Subsystem Job Master table (F986113) will not be processed, and no new records can be written. The unprocessed records will essentially be lost. That is, the process 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 ERP 8.0 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.



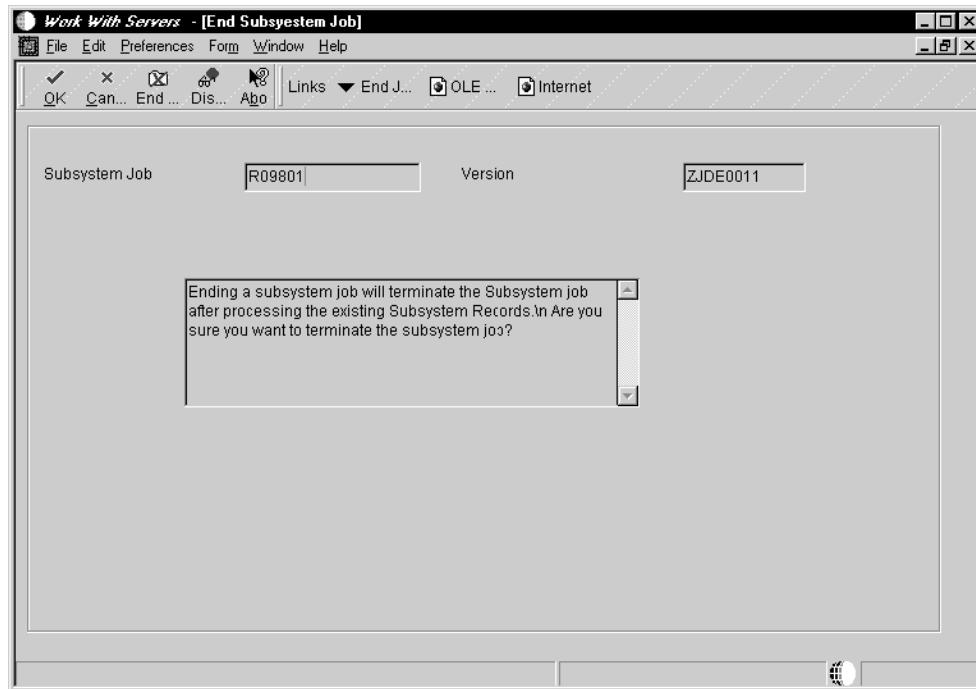
4. On End Subsystem Job, click OK.

► To end ERP 8.0 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

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

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

ERP 8.0 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 ERP 8.0 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
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

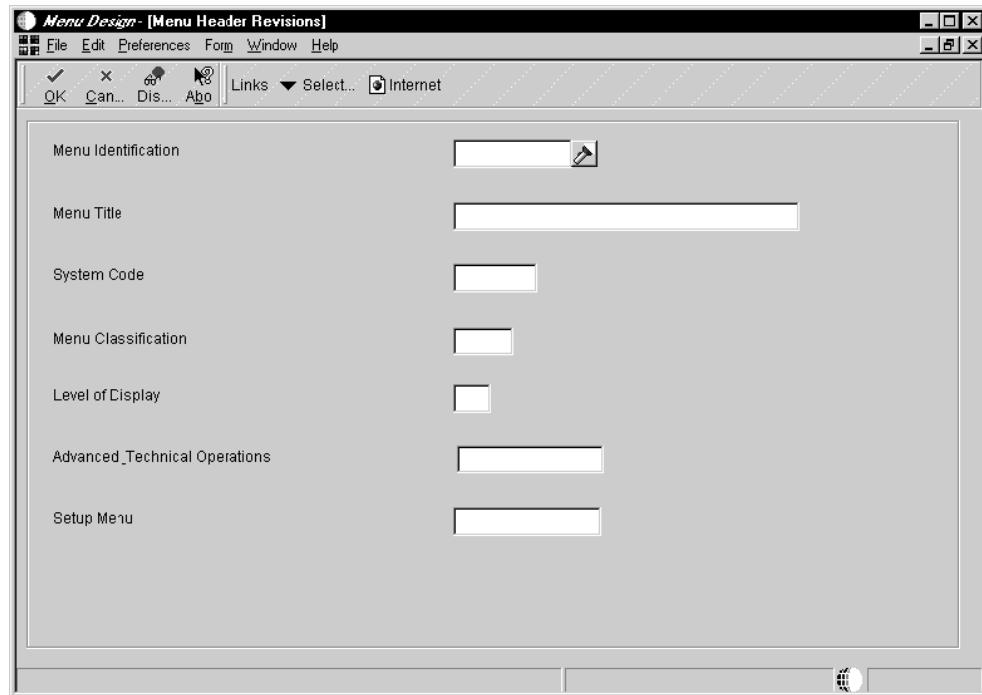
Menus are the entry point to J.D. Edwards applications and reports. To access an application or report from a menu, the application or report must be attached to a menu selection on the menu.

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:

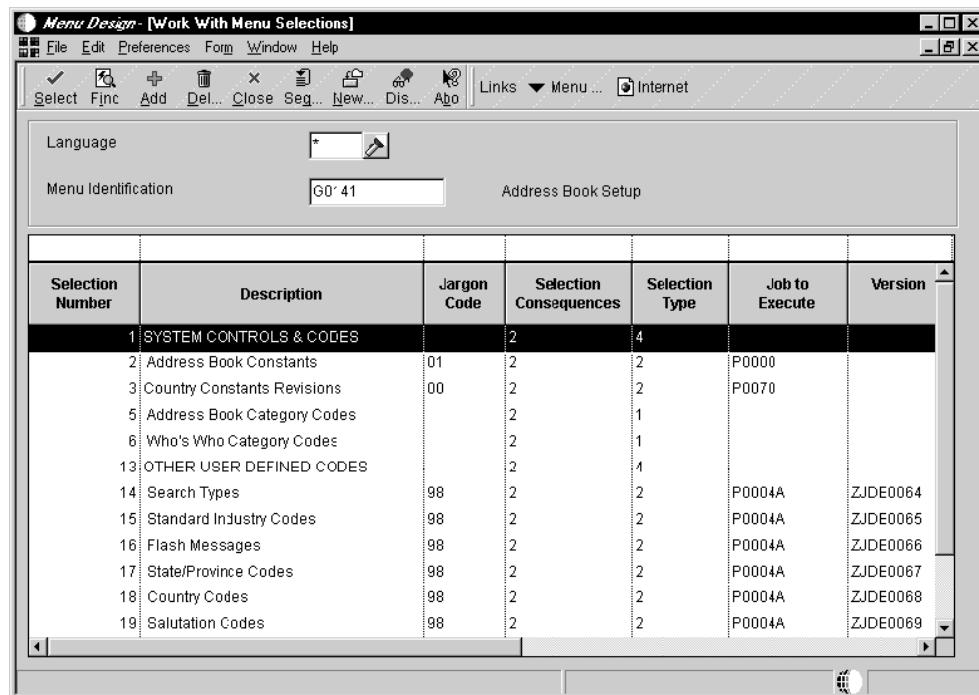
- Menu Identification
- Menu Title
- Product Code
- Menu Classification
- Level of Display
- Advanced & Technical Operations
- Setup Menu

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.



3. 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

Menu Description SY LOD Clas
s

DEMO APPLICATIONS 00

Sel # Description Job To Form Version Ctry Appl Run Time SC

Name Ovrd Message Execute

0 APPLICATIONS 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

Work With Menu Selections displays available selections for the selected menu. Use Work With Menu Selections to add or change menu selections, add an application to a menu, add or change a web address on ERP 8.0 Explorer Help, create a web view subheading on a menu, link menus or create fast path selections.

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 ERP 8.0 Application, ERP 8.0 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.

► 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.

Menu Design - [Work With Menu Selections]

Selection Number	Description	Jargon Code	Selection Consequences	Selection Type	Job to Execute	Version
1	SYSTEM CONTROLS & CODES		2	4		
2	Address Book Constants	01	2	2	P0000	
3	Country Constants Revisions	00	2	2	P0070	
5	Address Book Category Codes		2	1		
6	Who's Who Category Codes		2	1		
13	OTHER USER DEFINED CODES		2	1		
14	Search Types	98	2	2	P0004A	ZJDE0064
15	Standard Industry Codes	98	2	2	P0004A	ZJDE0065
16	Flash Messages	98	2	2	P0004A	ZJDE0066
17	State/Province Codes	98	2	2	P0004A	ZJDE0067
18	Country Codes	98	2	2	P0004A	ZJDE0068
19	Salutation Codes	98	2	2	P0004A	ZJDE0069

3. On Work With Menu Selections, click Add or choose an existing selection to change.

Menu Design - [Menu Selection Revisions]

Selection Number:

Selection Description:

Selection Consequences:

Jargon Code:

Country Code:

Selection Type:

<input checked="" type="radio"/> OneWorld Application	<input type="radio"/> OneWorld Report	<input type="radio"/> World Vision
<input type="radio"/> Windows Application	<input type="radio"/> Web View Sub-Heading	<input type="radio"/> Menu

Icon:

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
 - 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.

► To define the menu selection

1. On System Administration Tools (GH9011), choose Menu Design (P0082).
2. 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
 - 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 ERP 8.0 applications and reports, WorldVision applications, and Windows applications to a menu. You can also link a menu to another menu.

► To add a ERP 8.0 application to a menu

You can use this procedure to add a ERP 8.0 application created in Forms Design as a menu selection.

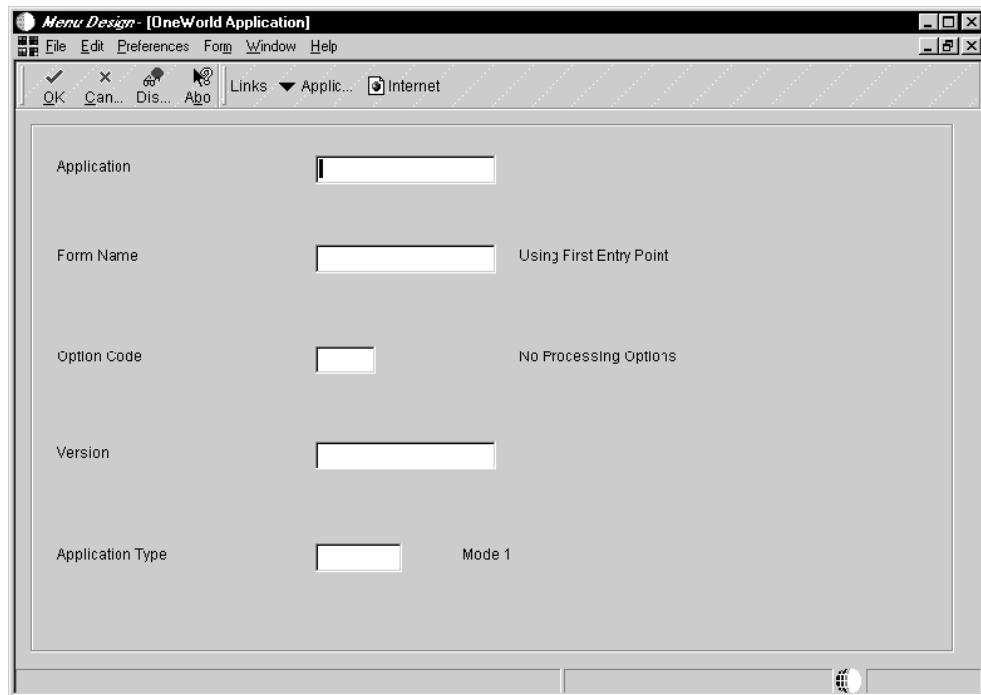
1. On System Administration Tools (GH9011), choose Menu Design (P0082).

2. Locate the menu on which you want to add a ERP 8.0 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 ERP 8.0 Application, complete the following fields:

- Application Type
- Form Name

You can use this field to define a specific entry point for the ERP 8.0 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.

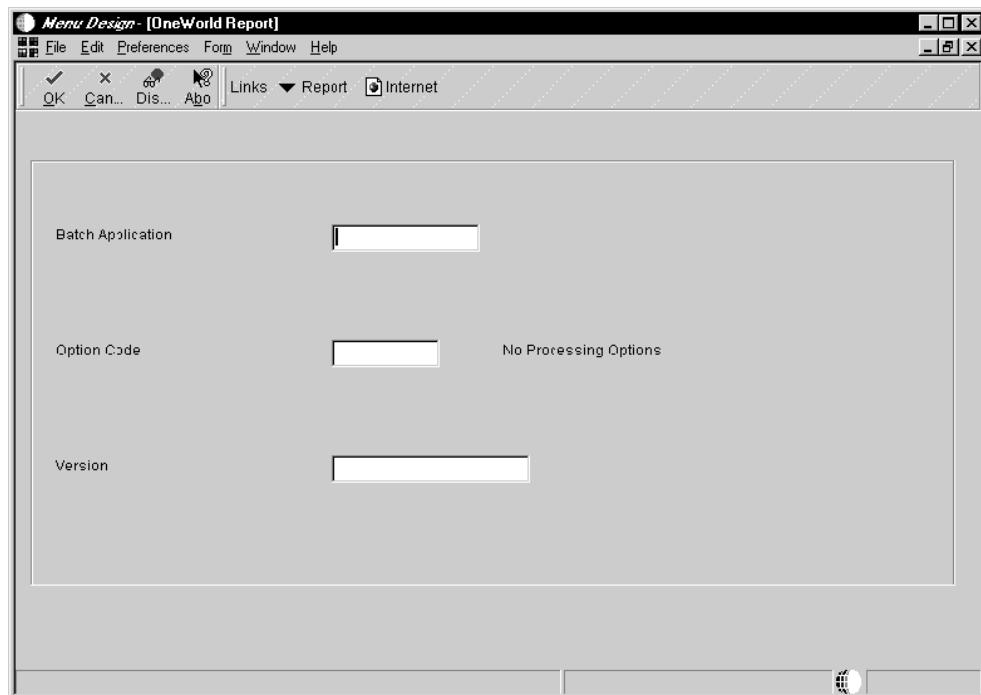
► To add a ERP 8.0 report selection to a menu

You can add a report created in the ERP 8.0 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 ERP 8.0 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 ERP 8.0 Report option, and then choose Define from the Form menu.



6. On ERP 8.0 Report, complete the following fields:

- Application Type
- Option Code
- Version

Use Form menu options to view and choose from a list of reports and versions.

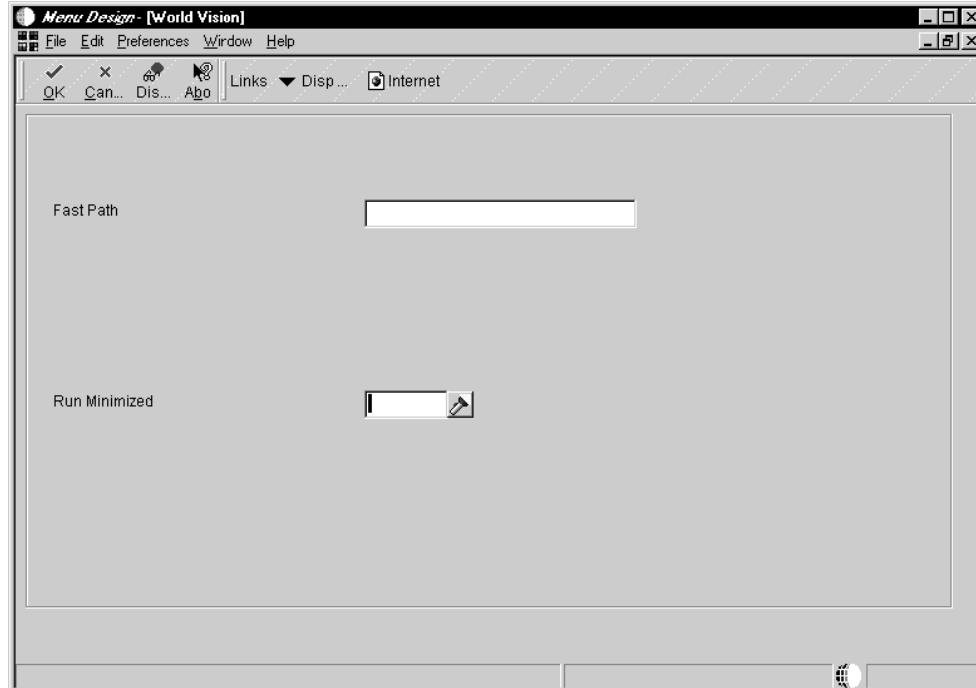
► To add a WorldVision application to a menu

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

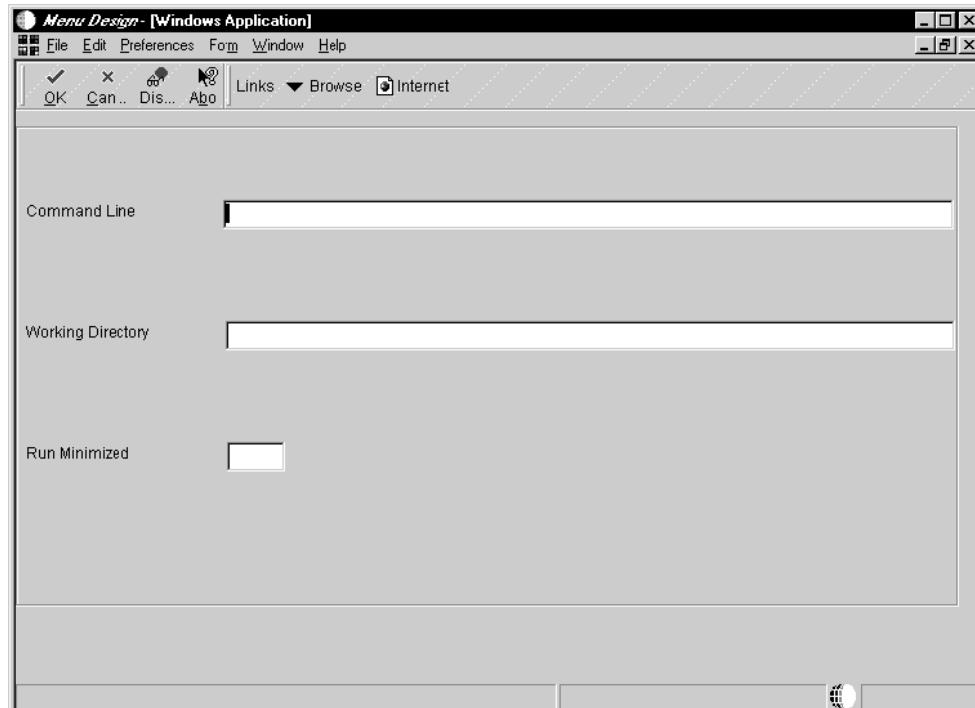
► To add a Windows application to a menu

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 ERP 8.0 menu, such as winword.exe.

- Working Directory

Enter the path where the Windows application resides on your local machine.

- Run Minimized

Adding or Changing Web Addresses on ERP 8.0 Explorer Help

You can add web addresses or change some of the addresses that appear on the Help menu of ERP 8.0 Explorer. From the Help menu on ERP 8.0 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 ERP 8.0, 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 ERP 8.0 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

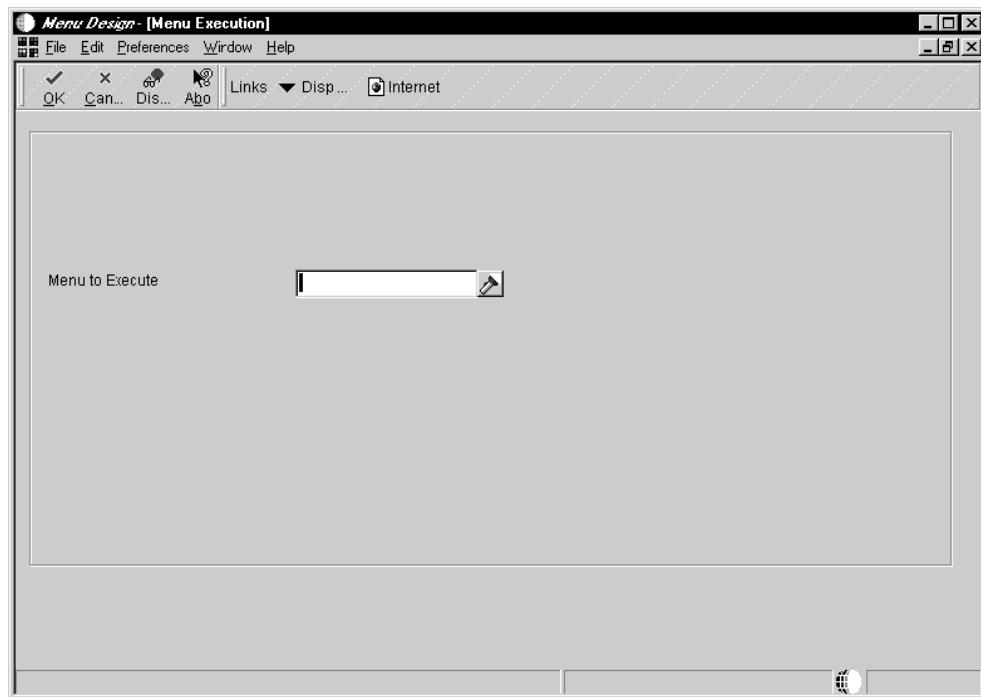
1. On System Administration Tools (GH9011), choose Menu Design (P0082).
2. Locate the menu on which you want to create a subheading.
3. On Work With Menu Selections, click Add.
4. On Menu Selection Revisions, complete the following field:
 - Selection Number
5. Click the Web View Sub-Heading option.
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

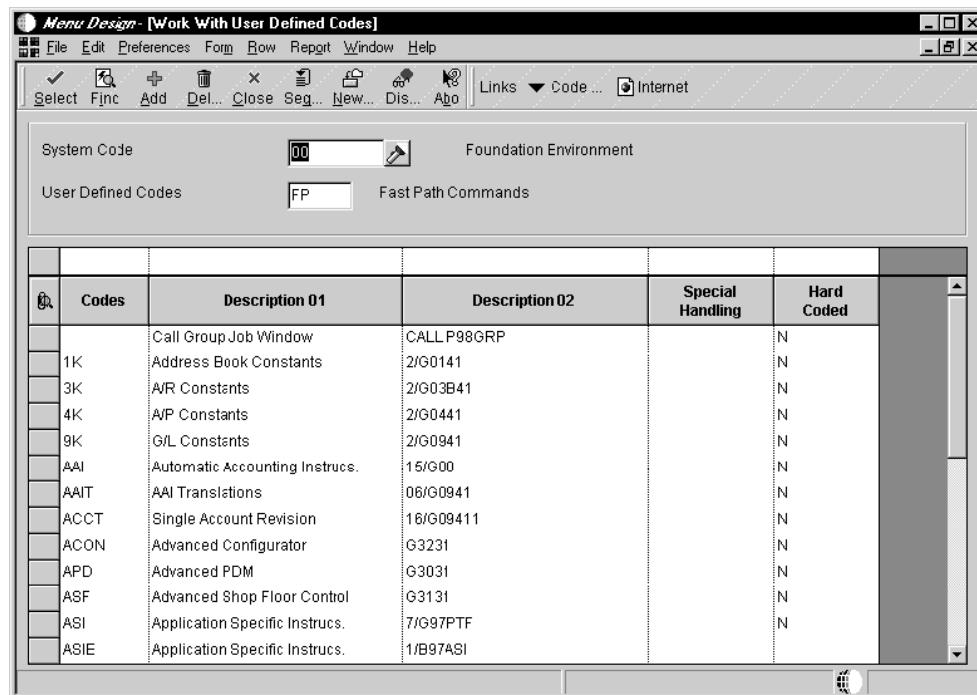
Creating Fast Path Selections

You can quickly move among menus and applications by using fast path commands. A fast path command is:

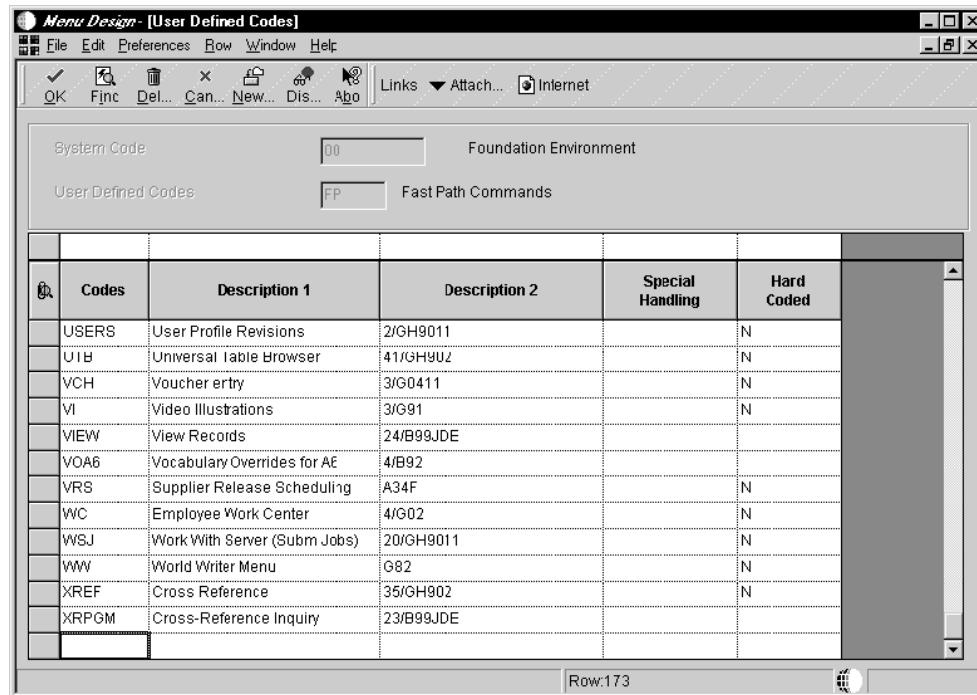
- An abbreviation that is either shipped with J.D. Edwards demo data or that you define to suit your business environment. For example, the fast path OMW accesses the application Object Management Workbench, so that you can work with ERP 8.0 objects.
- A combination of a menu selection and a menu number. 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 ERP 8.0 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 ERP 8.0 Explorer because the menu might be filtered.

Working with Menu Selection Revisions

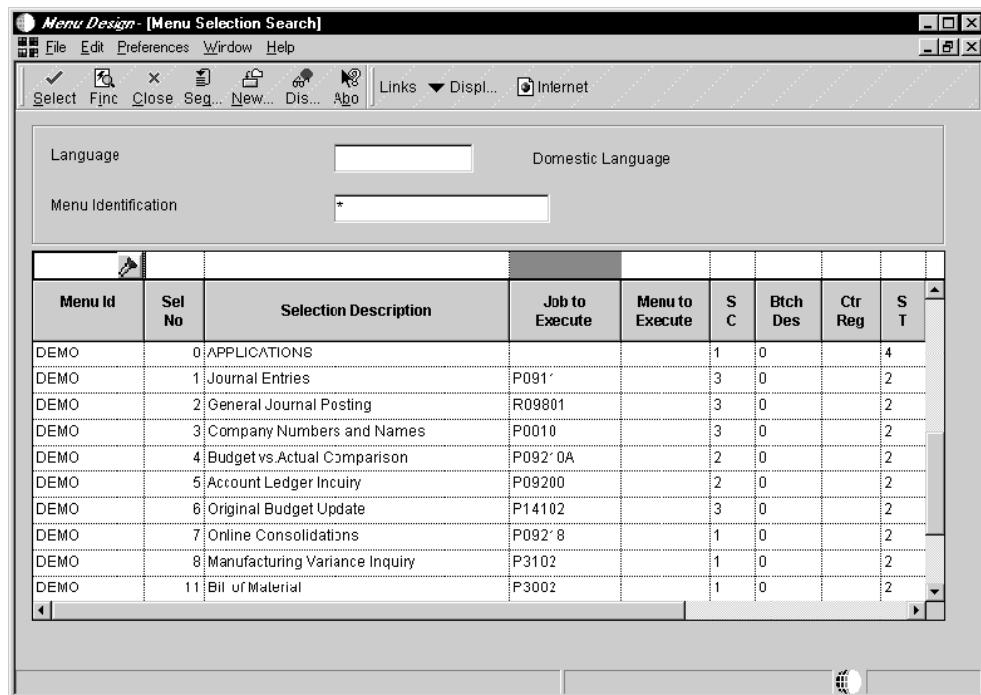
You can revise your existing menu selections to change menu text for languages, change menu selection text, or renumber a menu selection.

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.

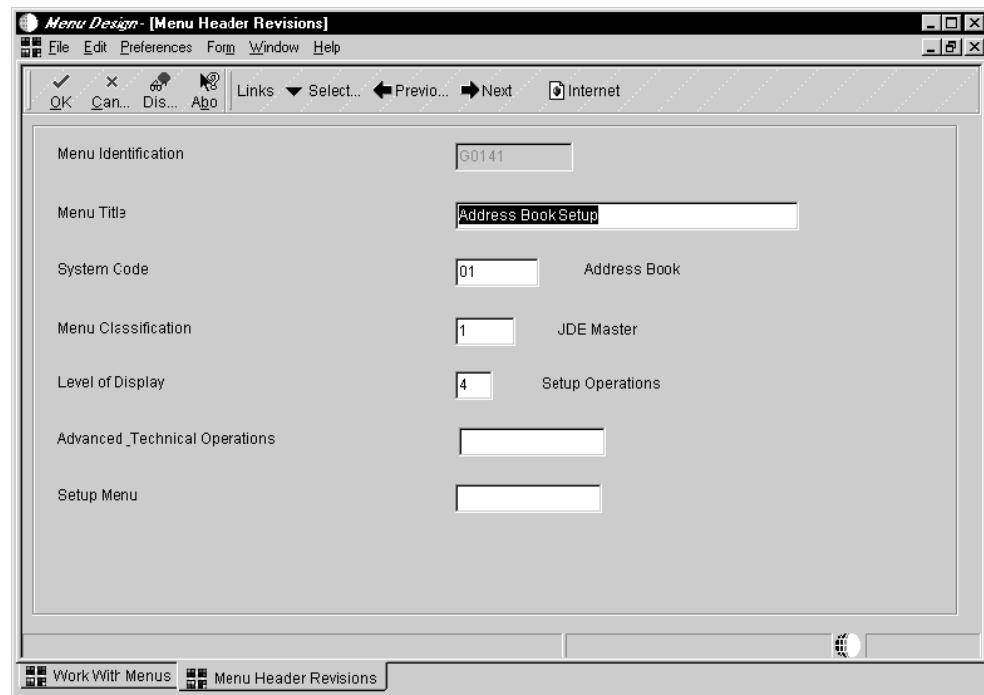
The selection description, consequences, and type are inserted into the newly added menu selection.

Changing Menu Text for Languages

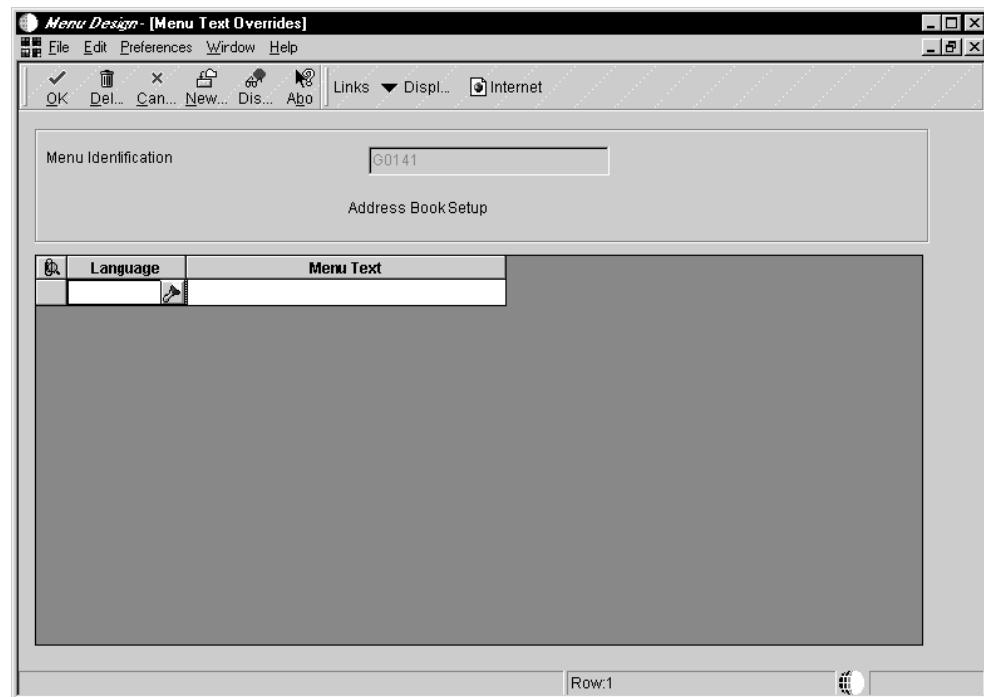
You can use Title Overrides to change the language and description of a menu selection.

► 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

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

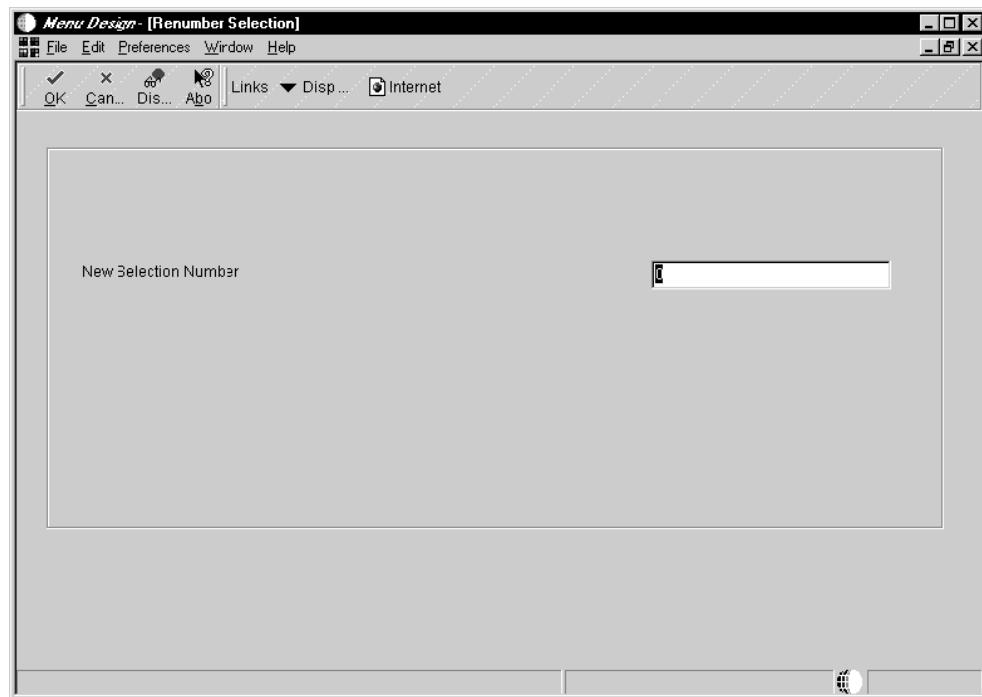
Changes in menu text are not displayed until the changed menu is closed and reopened. You can also choose Refresh from the View menu to update the menu text.

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

User Profiles

User Profiles

A user profile defines a specific user or group of users to ERP 8.0. 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 ERP 8.0, and the language preference of the user or group. You use the User Profiles (P0092) application to handle adding users and setting up user profiles. You can also assign roles to users. A role defines the tasks that an end user sees in Solution Explorer.

Understanding User Profiles

You can use the User Profiles application (P0092) to define specific users or groups to ERP 8.0. 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 ERP 8.0. 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 ERP 8.0.
- The language preference and country code for the text that displays on ERP 8.0's menus, forms, and country-specific applications.

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, ERP 8.0 takes the information from the group profile. ERP 8.0 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 ERP 8.0 on a workstation or third-party setup issues, such as assigning network user IDs.

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

14. 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*.
15. 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.
16. Add an Address Book record for the new user. See *Entering Address Book Records* in the *Address Book Guide*.
17. Add a user profile and assign the user to a group. See *Creating User and Group Profiles* in this section for information.
18. Add signon security records for the user. See *Working with Signon Security* in this guide for information.
19. 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.
20. Populate the machine table for the user's machine. See *Defining Machines* in the *Package Management Guide* for information.
21. 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.
22. 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:

Sigron security is not based on groups, because individuals must have their own ERP 8.0 passwords. There is a program with sigron security to quickly create individual security records by group, but after the records are created, security is assigned by individual. See *Working with Sigron Security* in this guide for information.

► To add multiple users

23. Using the Address Book Revisions application (P010102), create address book records for groups that you will use in user profiles.
24. Using the User Profiles application (P0092), add the group profiles. See *Creating User and Group Profiles* in this section for information.
25. Populate the various Address Book tables. If you are migrating data from a non-ERP 8.0 system, you can populate the data tables with a table conversion. Otherwise, you can manually add data to the Address Book tables.
26. 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.
27. 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.
28. The following settings are dictated by group:
 - Environments
 - User Overrides
 - Application Security
29. Run the User Profiles Summarization (R00921) batch process to view your new user profiles. See *Summarizing Group Profiles* in this section for information.
30. Create security workbench records for all groups and any individual overrides to those groups. See *Working with Security Workbench* in this guide for information.

31. 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.
32. Manually populate the Machine/Group Identification table (F00960). This table is automatically populated each time a machine signs onto ERP 8.0. However, if you intend to use schedule packages, or if you set the machine up for data replication before users have signed onto ERP 8.0, you must manually populate this table.
33. 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.
34. 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

You use the User Profile application (P0092) to set up user profiles. When you set up profiles as a system administrator, you create group profiles and user profiles for each user in the system. You also determine the environments available to each group and user and set up display preferences, such as language.

► 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 ERP 8.0 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.

Creating and Modifying User and Group Profiles

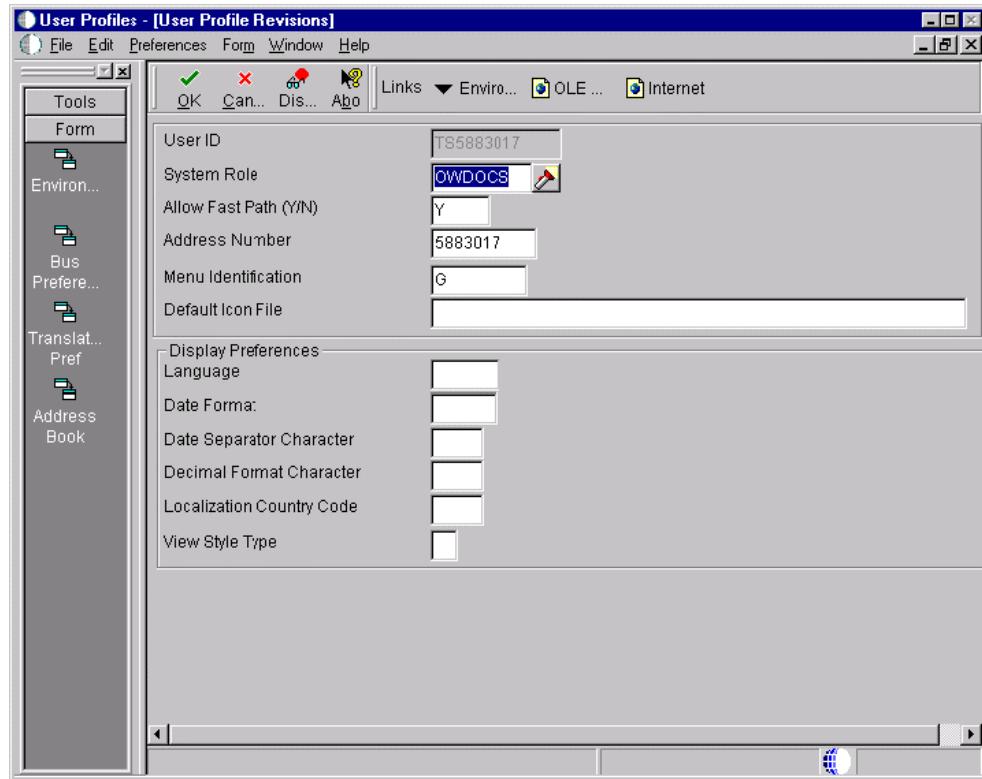
The system administrator needs to create a user profile for every user. The user profile defines certain setup and display features, such as access to fast path, language, date format, or country code. The administrator should first create all of the group profiles needed

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, ERP 8.0'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 CA (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 System Role 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.

Note:

A value for this field is required if you set the User Profile processing option that controls this field to "1." See *Understanding Processing Options for User Profiles* in this chapter for details.

To create a group profile, do the following:

- In the User ID field, enter the group name, such as ACCOUNTING.
- In the System Role field, type *GROUP.

Note:

You can modify the system role an individual holds by entering a new role 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
- View Style Type

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 ERP 8.0.
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.

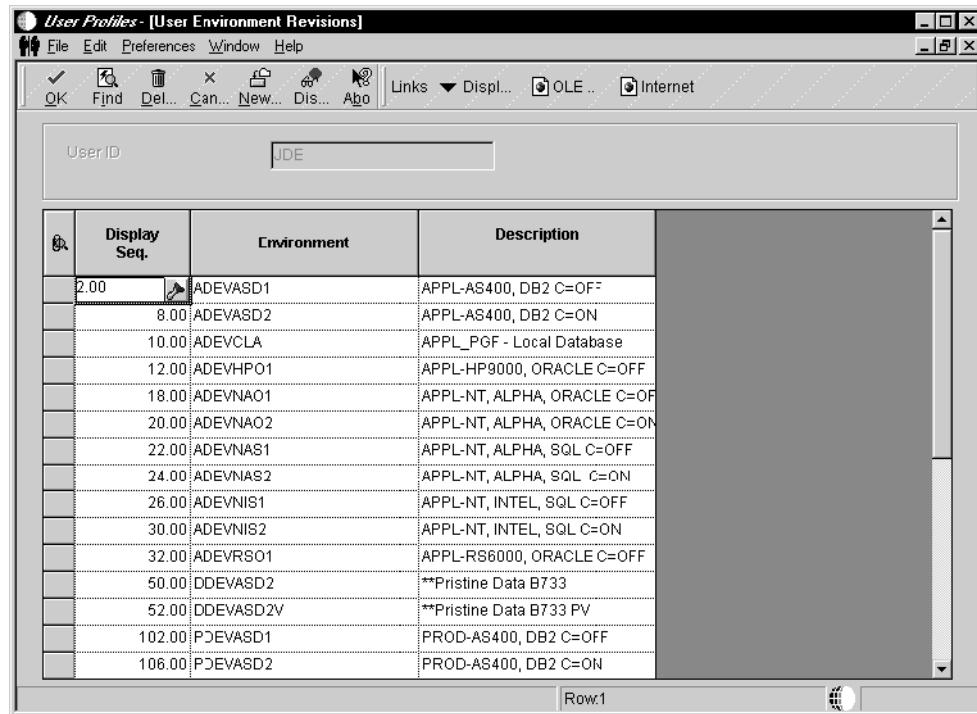
Assigning Environments to User and Group Profiles

You can assign a list of environments that each group or user can choose from when starting ERP 8.0. Each time users start ERP 8.0 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.

Assigning Business Preferences to User and Group Profiles

You can assign business preferences to user profiles to create customized processes in conjunction with the ERP 8.0 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**

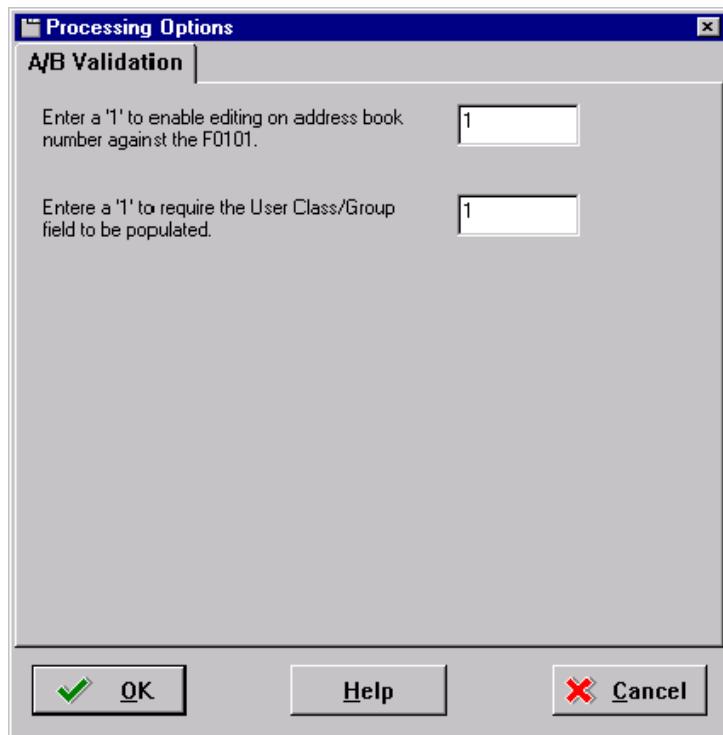
1. On the System Administration Tools menu (GH9011), choose User Profiles (P0092).
The Work with User Profiles form appears.
2. Click Find, choose a user profile, and then click Select.
The User Profile Revisions form appears.
3. From the Row menu, choose Business Preferences.
The Business Preferences 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:



A/B Validation

Enter a '1' to enable editing on address book number against the F0101.
Enter a '1' to require the System Role field to be populated.

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.

Enter a "1" or "0" (or leave blank) to require or not require a value for the User Class/Group (System Roles) field.

- Entering a "1" means that a value for the System Roles field in the User Profiles Revision form is required.
- Entering a "0" or leaving the field blank means that a value for the System Roles field in the User Profiles Revision form is not required.

For a discussion of roles, see *Setting Up User Roles* in this section.

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 ERP 8.0 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 (R900921) 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.

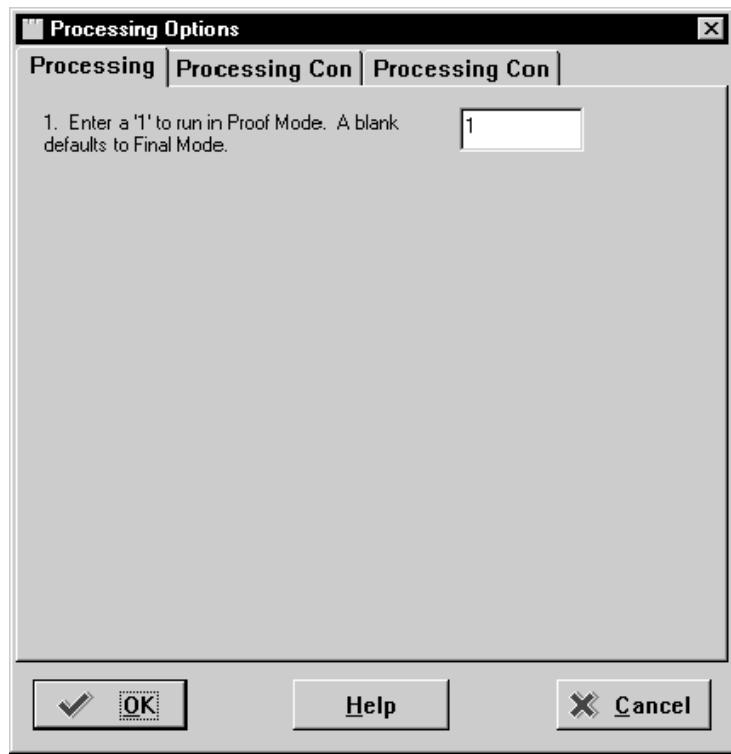
Before You Begin

- 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.

After you complete the Criterion Design form, the Processing Options form appears.



Processing

1. Enter a '1' to run in Proof Mode. A blank defaults to Final Mode.

Processing Con

2. Enter the values to be used in creating the User Profile records.

Enter a '1' to use initials plus address book number in the User Id. Blanks default to just the address book number.

Group

Fast Path

Language

Date Format

Date Separator Character

Date Format Character

Country

Processing Con

3. Entering in environments for the users will override what is already associated with the specified group profile.

Environment 1

Environment 2

Environment 3

Environment 4

Environment 5

Environment 6

Environment 7

Environment 8

Environment 9

Environment 10

Environment 11

Environment 12

-
5. On the Processing Options form, enter the following information:

- Option 1: Enter one of the following values:

- 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.
- 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 (R900921) report**

1. On the Advanced Operations menu (GH9012), choose Summarize Group Profile Information (R900921).
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 (R90092):

Summary of Environments, Packages and Profiles					
GROUP		Group	OWPVC	Address Number	7464
					Menu Identification G
					Fast Path Y
		Environment	Description		Sequence
APPLHPO1		APPL-HP9000A Oracle C=Off IC=1	36.00		
APPLHPOC2		APPL-HP9000A Oracle C=On IC=2	37.00		
APPLJDED1		APPL - JDED C=Off IC=1	5.00		
APPLJDED2		APPL - JDED C=On IC=2	10.00		
APPLJDEDMN		APPL - JDED JDFMN C=On IC=2	20.00		
APPLMVS		APPL - S/390 MVS DB2	340.00		
APPLMVS1		not available	164.00		
APPLMVSDC2		not available	165.00		
APPLNTAO1		APPL - NT Alpha Ora C=Off IC=1	152.00		
APPLNTAO2		APPL - NT Alpha Ora C=On IC=2	153.00		
APPLNTAS1		APPL - NT Alpha SQL C=Off IC=1	147.00		

Setting up User Roles

After you have set up user profiles, you can assign roles to the users in your organization. Roles define a user's permissions within ERP 8.0. For example, a role might define the tasks that a group of users see when they work in Solution Explorer. You can use roles to grant the users playing them as much or as little access to ERP 8.0 functions as you deem necessary.

See *User Profiles* for details on setting up user profiles.

Assigning roles accomplishes the following purposes:

- Users see only those tasks and perform only those activities that relate to their jobs. For example, a user playing the role of A/P clerk might not need to see all the tasks that an A/P manager would. You can create both of these roles and define a different set of tasks to which each has access.
- Users can play multiple roles. Within an organization, a user might have many responsibilities, none of which can be defined by a single role. A user who has been assigned multiple roles can switch roles according to the work required.
- Administrators can set up ERP 8.0 security based on user roles. A user's access to applications, forms, table columns, data sources, and so on is based on one or more roles to which he or she has been assigned.

Administrative Setup of Roles

From a ERP 8.0 administrator's point of view, the steps required to set up roles for users are summarized in the following table:

Administrative Step	ERP 8.0 Application Used	ERP 8.0 Form Used	ERP 8.0 Table(s) Used
Define Roles	P0092 (User Profile)	W0092A (User Profile)	F0092

	(Revisions)	(Revisions)	
Create role relationships tying users to roles	P95921 (Role Relationships)	W95921A (Work with Role Relationships)	F95921
Sequence roles	P0092	W0092L (Work with Role Sequences)	F00926
Add security to roles	P00950 (Security Workbench)	Various, depending on the type of security administrator applies to the role	F00950
Populate User Profile table with roles stored in UDC H95/RL during Roles Phase I	R89959211 and R89959212	N/A	F00926, F0092
Run UBE to populate Role Relationships table	R8995921	N/A	F95921, F0092

The ERP 8.0 Portal, Solution Explorer, and ERP 8.0 client workstations use various APIs to retrieve role relationships data from the F95921 table, allowing users to play assigned roles.

Defining Roles

As part of setting up your system, you must define the roles that users in your organization will play. These roles, in turn, define the tasks that users see when they work in the Solution Explorer, the permissions they have to run the ERP 8.0 Portal, and so on. After you have defined a role, you can associate users with it and apply security to it.

ERP 8.0 stores your role descriptions in the F00926 table. If you previously defined roles using the user defined code (UDC) H95/RL table, you can run the R899f9211 report to populate the F00926 table with those older role descriptions.

See Also

- ❑ *Task Setup and Applying Roles to a Task* for information on tying tasks and task relationships to a role.
- ❑ *Working with Security Workbench* for information on setting up security for roles.

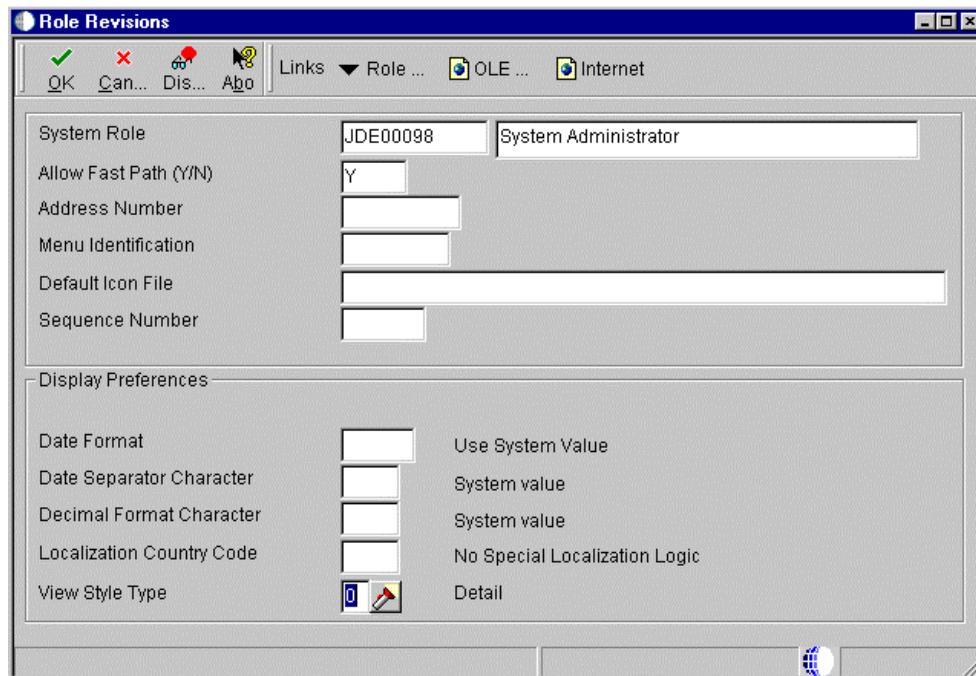
► To define a role

1. On the System Administration Tools menu (GH9011), choose User Profiles (P0092).
ERP 8.0 launches the User Profile Revisions (P0092) application.
 2. In the Work With User/Role Profiles form, choose Add Roles from the Form menu.
-

Note:

You cannot add a role by clicking the Add button on the tool bar of the Work With User/Role Profiles form.

ERP 8.0 launches the Role Revisions form.



3. Complete the following required field:
 - System Role
4. Complete the Sequence Number field if you want to specify that the new role be given a particular spot in the sequential order of roles stored in the F00926 table.
5. Complete any of the remaining fields and click OK.

Revising Roles

Using the Work With User/Roles Profiles form, you can find all the roles that you have defined. You can then choose a role and modify its properties, using the Role Revisions form. The Role Revisions form allows you to change the properties of the role, including its description, address number, and menu identification.

► To revise roles

1. On the Systems Administration Tools menu (GH9011), choose User Profiles (P0092). ERP 8.0 launches the User Profile Revisions (P0092) application.
2. In the Work With User/Roles Profiles form, choose the following option and click Find:

The Role Revisions form appears.

3. In the Role Revisions form, make needed changes and click OK.

Setting up Role Relationships

A role relationship ties a user to a defined role. You can assign more than one user to a role, or you can assign more than one role to a user. To establish a role relationship, you use the Role Relationships application (P95921), which allows you to add, remove, or revise a role relationship for a user.

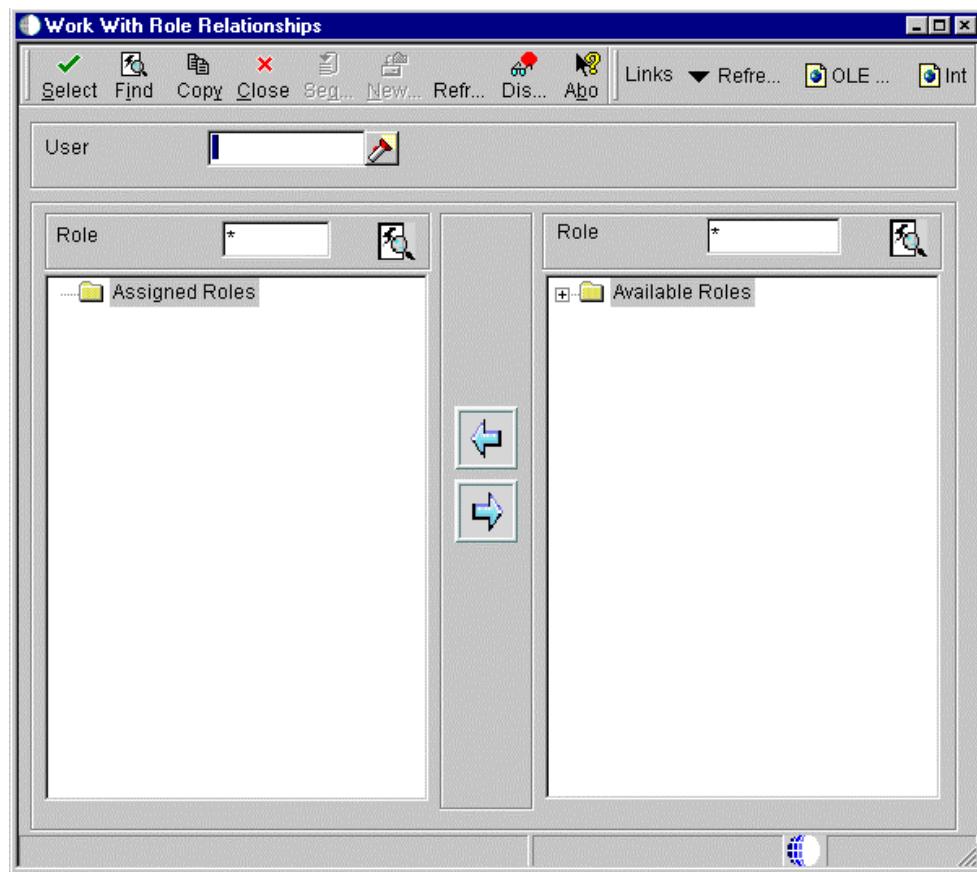
Creating a Role Relationship

After you have defined a role, you use the Work With Role Relationships form to create a relationship between a user and the role. Adding the role to the user's list of assigned roles means that the user will be able to choose the role at sign-on using the Role Chooser. The Role Chooser is a combo box on the ERP 8.0 sign-on screen that displays a user's assigned roles. You can limit the freedom a user has to choose roles by disabling the Role Chooser. With the Role Chooser disabled, the user must enter ERP 8.0 playing all assigned roles.

► To create a role relationship

1. In the Solution Explorer, launch the Roles Relationships application (P95921).

The Work With Role Relationships form appears.



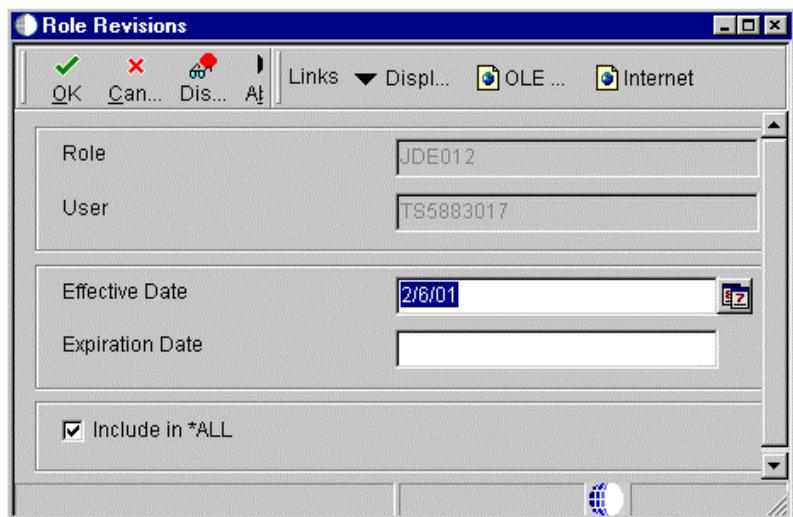
2. Complete the following field and click Find:

- User

ERP 8.0 displays the user's assigned roles and the available roles in separate tree controls.

3. Choose a role from the Available Roles tree control and click the Add Role button to add it to the list of assigned roles.

The Role Revisions form appears.



4. In the Role Revisions form, enter an effective date, if you want an effective date that is different than today's date.

Today's date is the default value for the Effective Date field. If you do not use the default value, be sure to enter a date prior to today's date, or ERP 8.0 returns an error message.

5. Enter an expiration date, if one is needed.

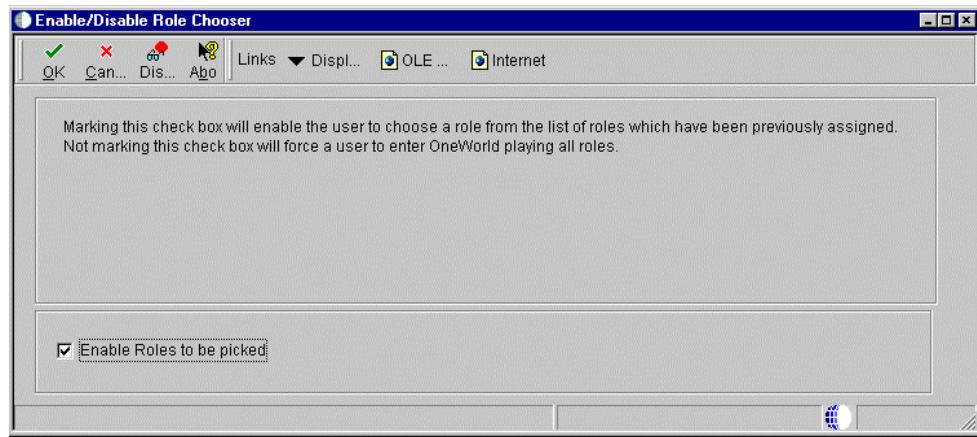
The role has no expiration date if you do not complete the Expiration Date field.

6. Choose the Include in ALL* option if you want the role to be one that the user can play if he or she enters ERP 8.0 playing all roles and click OK.

If you do not choose the Include in ALL* option, the user enters ERP 8.0 playing all roles except the one added.

7. Choose Enable Role Chooser from the Form menu of the Role Relationships form.

The Enable/Disable Role Chooser form appears.



8. Choose the option Enable Roles to be picked if you want the user to be able to choose the new role from a list of all assigned roles at sign-on, and click OK.
If you do not choose this option, the user must enter ERP 8.0 playing all assigned roles.
9. To populate the Role Relationships table (F95921) with User/Role records from the User Profiles table (F0092), run the User Profiles Populate Role Relationships report (R8995921).

Revising Role Relationships

After you have created one or more role relationships for a user, you can revise the relationships using the Work With Role Relationships form and the Role Revision form. You can revise role relationships by:

- Removing an assigned role for a user
- Changing the expiration date for an assigned role
- Excluding an assigned role from *ALL
- Making a role previously excluded from *ALL part of *ALL
- Making changes to an available role

► To revise a role relationship

1. In the Solution Explorer, launch the Role Relationships application (P95921).
The Work With Role Relationships form appears
2. Complete the following field and click Find:
 - User
3. To remove an assigned role, choose a role from the Assigned Roles tree control and click the Remove Role button.
4. To revise an existing role relationship, choose a role from the Assigned Roles tree control and click Select.

5. In the Roles Revision form, make changes to either or both of the following and click OK:
 - Expiration Date
 - Include in *ALL
6. To revise an available role, choose a role from the Available Roles tree control and click Select.
7. In the Roles Revision form, make changes to any of the following and click OK:
 - Effective Date
 - Expiration Date
 - Include in *ALL

Workstation Initialization File Parameters

At ERP 8.0 sign-on, users can choose one or more roles to play, depending on how many you have assigned to them. If users choose *ALL, they enter ERP 8.0 playing all assigned roles. Two parameters that relate to roles are in the workstation jde.ini file. The table below displays the parameters, the workstation .ini file section in which they are found, and the default settings.

Jde.ini Parameter	Jde.ini Section	Default Setting
LASTROLE	[SIGNON]	*ALL
Default Role	[DB SYSTEM SETTINGS]	*ALL

The LASTROLE parameter value defines the first role that appears for the user to choose at sign-on. If ERP 8.0 cannot find a user role at sign-on, the Default Role parameter value defines the role that the user plays.

For more information on choosing roles at sign-on, see *Choosing Roles for Display at Sign-On*.

Choosing Roles for Display at Sign-On

After you have defined roles, created role relationships, and made any necessary modifications to the jde.ini file, users can sign on to ERP 8.0 using the Role Chooser. At the ERP 8.0 sign-on form, the user enters a user ID and password. The user must then enter a valid environment and role before entering ERP 8.0.

The following table summarizes the scenarios that are possible when the user encounters the Environment and Role fields at sign-on, as well as ERP 8.0's behavior in each scenario:

Sign-on Scenario	ERP 8.0 Behavior
User enters values to both the Environment and Role fields.	ERP 8.0 validates the role against the environment. If the role is not valid for the chosen environment, the Environment Chooser appears and the user must choose an environment that is valid for the role.
User enters a value only in the Role field.	The Environment Chooser appears, containing only the valid environments for the chosen role.
User enters a value only in the Environment field.	The Role Chooser appears, containing only the valid roles for the user and the chosen environment.
User does not enter a value in either the Environment field or the Role field.	The Role Chooser appears, containing only the valid roles for the user and the chosen environment, followed by the Environment Chooser, containing only the valid environments for the chosen role.

Delegating Roles

You can delegate your role relationship records to other users using the Work With Delegation Relationships form. You might want to delegate one or more of your roles to another user if you are going to be out of town and you want your work to be taken care of while you are gone.

When you delegate your role relationship records, you copy existing records to another user. You cannot use the Work With Delegation Relationships form to create a new role relationship for the user. To create a role relationship see *Creating a Role Relationship* and *To create a role relationship*.

► To delegate roles

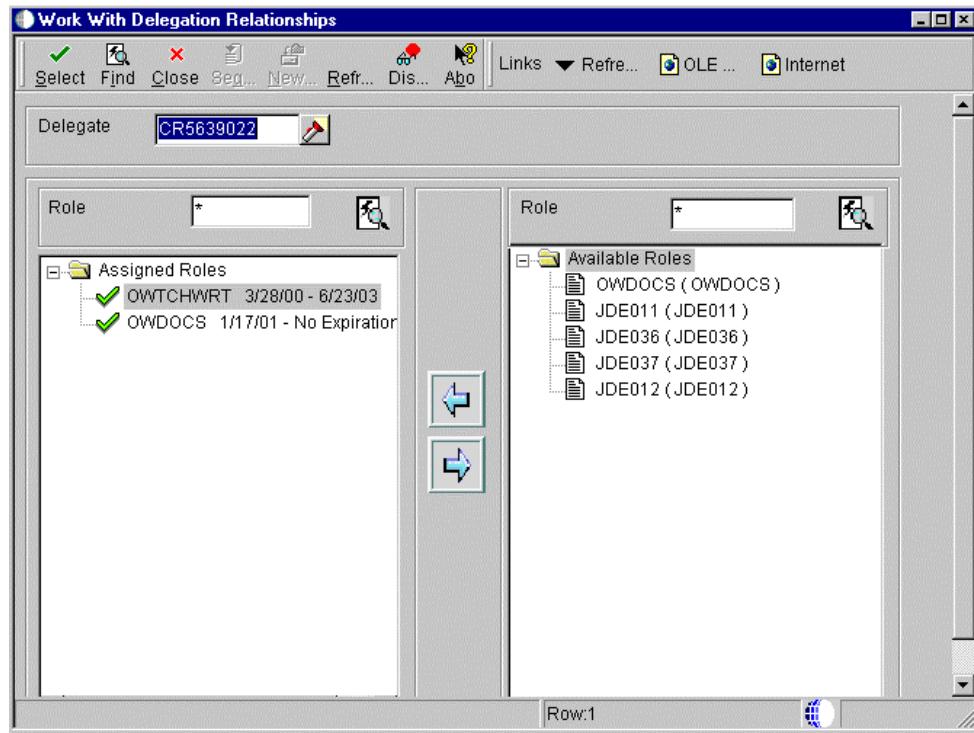
1. From the Solution Explorer, launch the Role Relationships application (P95921).

The Work With Role Relationships form appears.

2. In the Work With Role Relationships form, complete the User field by entering the user ID of the delegator and click Find.

3. Choose Roles Delegation from the Form menu.

The Work With Delegation Relationships form appears.



4. In the Work With Delegation Relationships form, complete the User field by entering the user ID of the user being delegated to and click Find.

The roles of the user who is delegating appear in the Available Roles tree control. The roles of the user who is being delegated to appear in the Assigned Roles tree control.

5. To delegate a role, choose the role from the Available Roles tree control and click the Add Role button.

The Roles Revision form appears.

6. Complete the following and click OK:

- Effective Date

Complete if you want the delegation to occur at a date that is different than the current date.

- Expiration date field

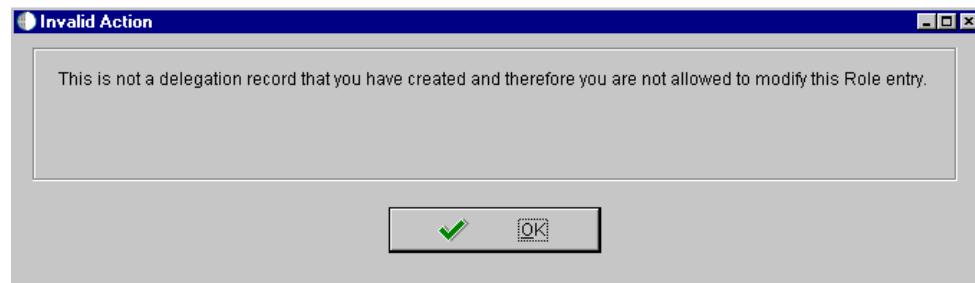
- Include in ALL*

Choose this option if you want the role to be one that the user can play if he enters ERP 8.0 playing all roles.

ERP 8.0 adds the delegated role to the Assigned Roles tree control in the Work With Delegation Relationships form.

Note:

You can use the Remove button in the Work With Delegation Relationships form only to remove a role that you delegated to another user. If you attempt to remove a role that you did not delegate to the user, ERP 8.0 displays a dialog box notifying you that the action is invalid.



Creating Role-to-Role Relationships

The Work With Distribution Lists form enables you to create lists of roles that are subsumed under a larger role. For example, you might create an ADMIN role that includes those users with the greatest number of administrative responsibilities and the broadest access to applications in ERP 8.0. You might also create several other roles that include individuals with more limited administrative responsibilities and access to fewer applications in ERP 8.0. If you create a distribution list based on roles, you might want to include on the list all roles with at least some level of administrative responsibility. Anyone in a role that is part of the distribution list would receive messages sent to the ADMIN role.

Using the Work With Distribution Lists form, you can add or remove roles from the distribution list as needed.

► To create role-to-role relationships

1. From the Solution Explorer, launch the Role Relationships application (P95921).
The Work With Role Relationships form appears.
2. Choose Distribution Lists from the Form menu.
The Work With Distribution Lists form appears.
3. In the Work With Distribution Lists form, complete the following field and click Find:
 - Role
4. To add a role to the distribution list, choose a role from the Available Roles tree control and click the Add Role button.
The Role Revisions form appears.
5. In the Role Revisions form, complete the following and click OK:
 - Effective date
Complete this field if you want the distribution list to become effective at a date that is different than today's date
 - Expiration date
 - Include in ALL*

ERP 8.0 adds the role to the Assigned Roles tree control.
6. To remove a role from the distribution list, chose a role from the Assigned Roles tree control and click the Remove Role button.

Administering Roles

You use ERP 8.0 to administer defined roles for which you have created role relationship records. For example, you can modify the order in which roles are displayed in the Role Chooser. You can quickly copy large numbers of roles to a single user, and you can copy large numbers of users to a single role relationship record. You can also use ERP 8.0 to specify the language used for the description of the new role.

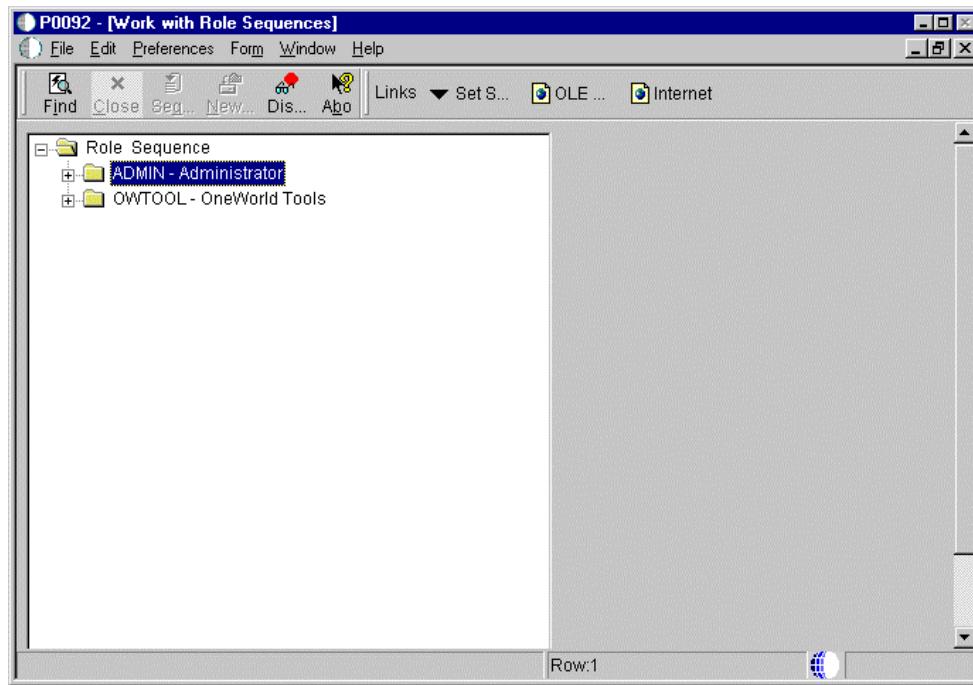
Sequencing Roles

To sequence roles, you use the Work With User Profiles (P0092) application. The Work With Role Sequences form contains all the roles that you defined for a user. You use this form to set up roles in a presentation order. After you set the order, at ERP 8.0 sign-on, the roles will appear in the Role Chooser in the order that you set.

► To sequence roles

1. On the Systems Administration Tools menu, (GH9011), choose User Profiles (P0092).
2. From the Form menu, choose Role Sequence.

The Work with Role Sequences form appears.



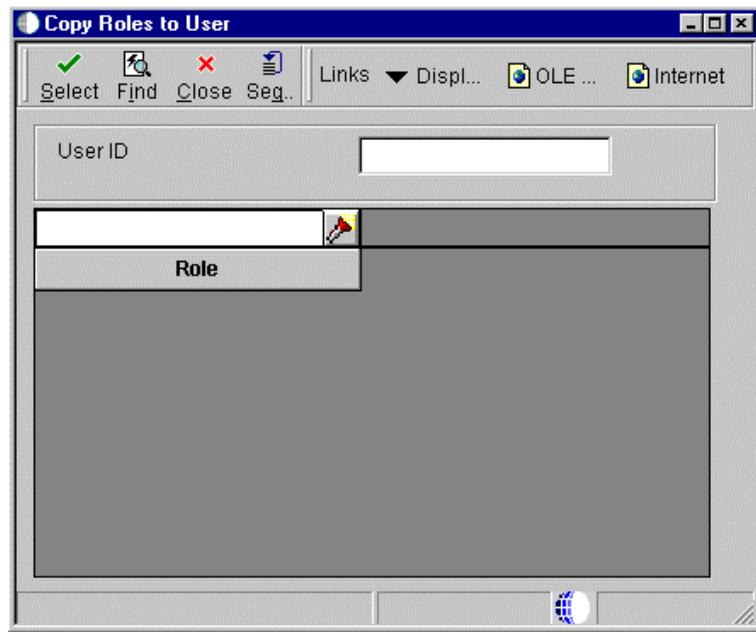
3. In the Work with Role Sequences form, choose a role from the tree structure and drag it to the point in the sequence of roles that you want.
4. After you have set the order you want, choose Set Sequence from the Form menu and click Close.
5. If you decide you do not want to change the sequence, choose Close Without Set from the Form menu and click Close.

Copying Roles to a User

The Copy Roles to User form allows you to copy one or more role relationship records to a single user. This is particularly useful if you want the user to play many roles because you can copy as many records as you want at one time.

► To copy roles to a user

1. In the Solution Explorer, launch the Role Relationships application (P95921).
The Work with Role Relationships form appears.
2. Choose Copy Roles to User from the Form menu.
The Copy Roles to User form appears.



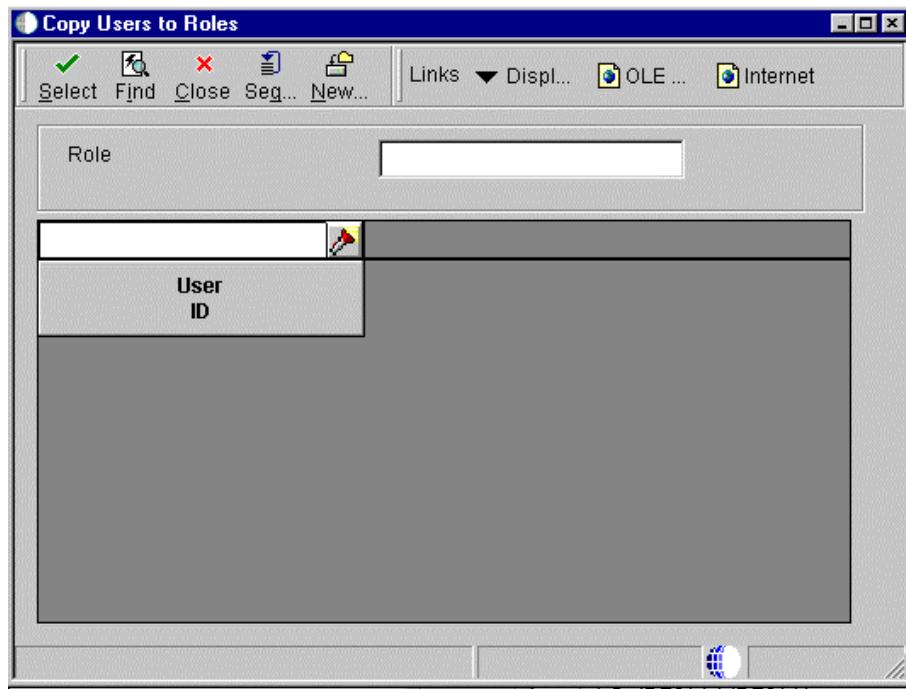
3. Complete the following field and click Find:
 - User ID
4. Choose the roles that you want to copy and click Select.
Hold down the Control key to choose more than one role to copy.
5. In the Role Revisions form, complete the following and click OK:
 - Effective Date
 - Expiration Date
 - Include ALL*
6. If you are copying more than one role relationship record, complete the Role Revisions form for each record you are copying.

Copying Users to a Role

The Copy Users to Roles form allows you to copy one or more users to a role relationships record. This is particularly useful if you want to assign many users to a single role.

► To copy users to a role

1. In the Solution Explorer, launch the Role Relationships application (P95921).
The Work with Role Relationships form appears.
2. Choose Copy Users to Role from the Form menu.
The Copy Users to Role form appears.



3. Complete the following field and click Find:
 - Role
4. Choose the users that you want to copy to a role and click Select.
Hold down the Control key to choose more than one user to copy.
5. In the Role Revisions form, complete the following and click OK:
 - Effective Date
 - Expiration Date
 - Include in ALL*
6. If you are copying more than one user record, complete the Role Revisions form for each record you are copying.

Copying User Roles

You can copy role relationship records of one user to another's using the Copy User Roles form. You can either copy and add the records, which means that ERP 8.0 adds the copied records to the user's existing records, or you can copy and replace, which means that you the copied records replace the user's existing records.

► To copy user roles

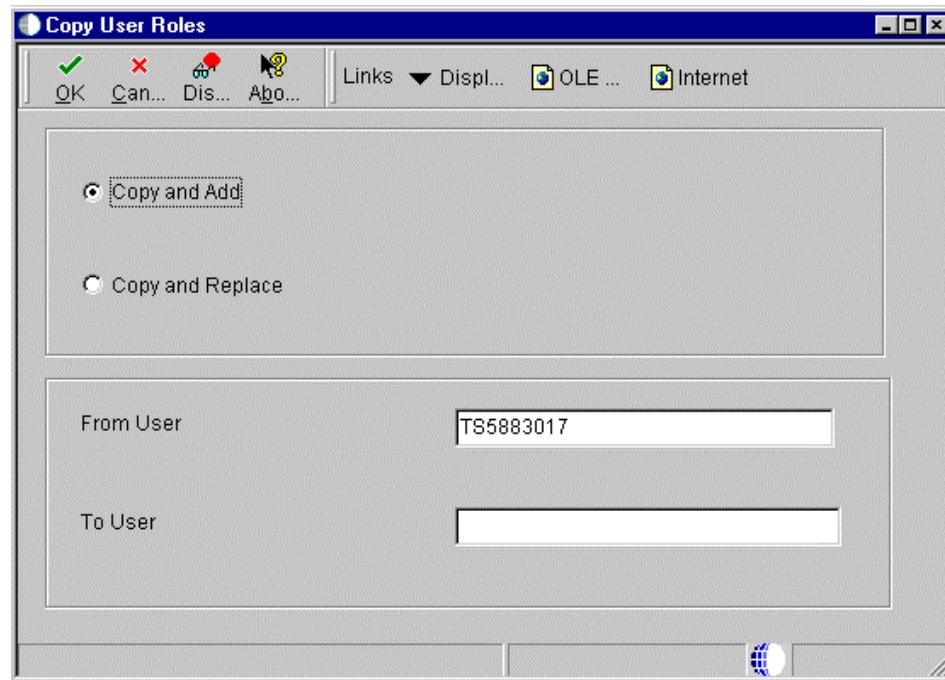
1. In the Solution Explorer, launch the Role Relationships application (P95921).
The Work with Role Relationships form appears.
2. Complete the following field and click Find:

- User

The user's roles appear in the Assigned Roles tree control.

3. Click Copy.

The Copy User Roles form appears.



4. In the Copy User Roles form, choose one of the following options:

- Copy and Add
 - Copy and Replace
5. To specify the user to whom you want the records copied, complete the following field and click OK:

- To User

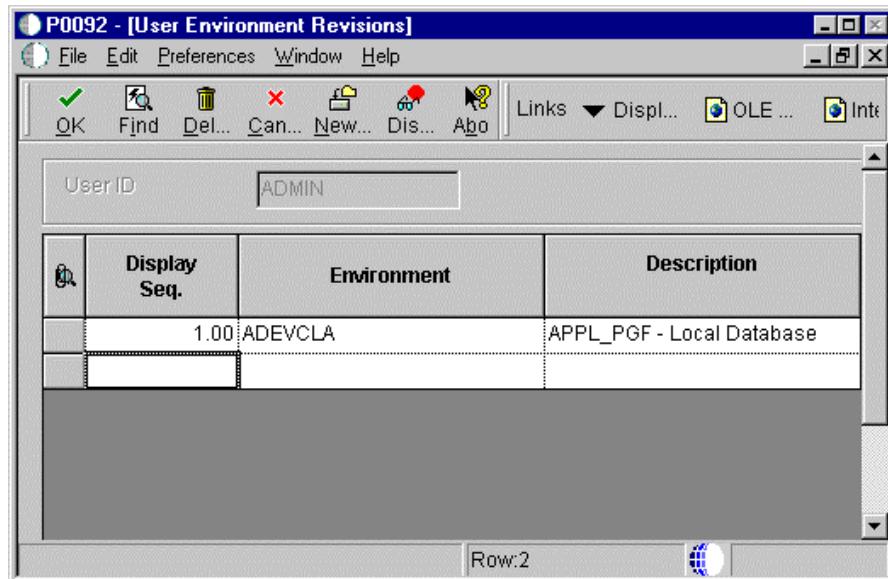
Adding an Environment to a Role

You assign each role a profile when you set up ERP 8.0 user and role profiles. You use the Work with User/Role Profiles form to assign a new environment to a role or to make a to change an existing environment for a role. For example, you might change the description of the environment.

When you add an environment to a role, you ensure that the environment will appear in the Environment Chooser, and you set up the sequence of environments in the Environment Chooser. At ERP 8.0 sign-on, the Environment Chooser presents each user a list of environments that are valid for the roles that the user plays.

► To add an environment to a role

1. On the Systems Administration Tools menu (GH9011), choose User Profiles.
The Work with User/Role Profiles form appears.
2. In the Work With User/Role Profiles form, choose the following option and click Find.
 - Roles Only
3. Choose a role from the detail area of the grid, and then choose Environments from the Row menu.
The User Environment Revisions form appears.



4. In the User Environment Revisions form, complete the following fields and click OK:

- Display Seq.

Use this field to specify the order in which the environments will be presented in the Environment Chooser at ERP 8.0 sign-on.

- Environment

Click the visual assist to choose from a list of valid values.

- Description

Note:

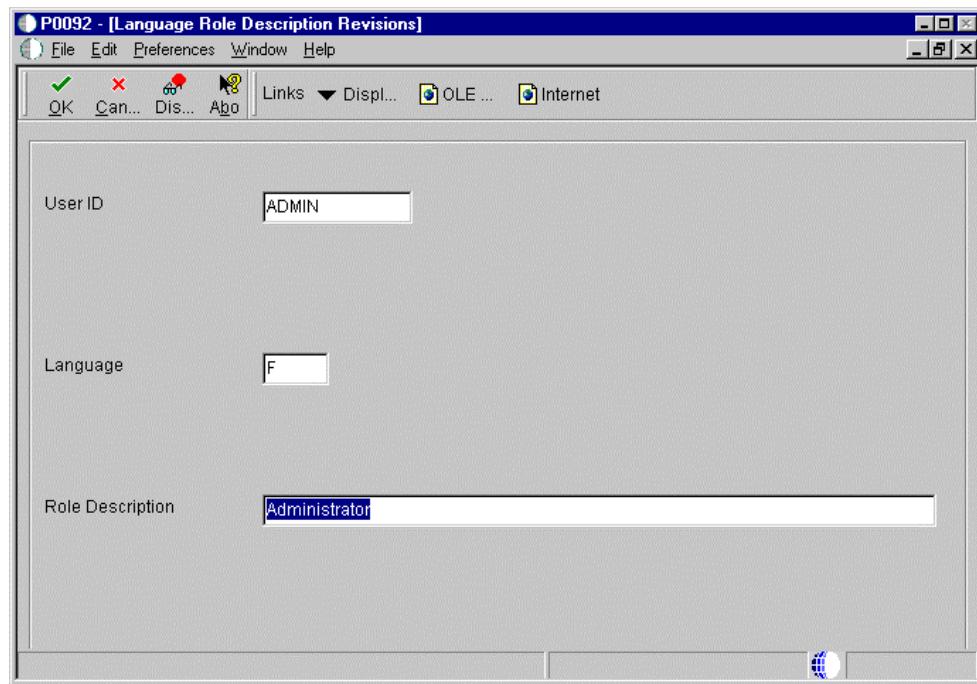
If you want to change an environment for a role, enter a new value for the Environment parameter and click OK.

Revising Language Role Descriptions

Using the Language Role Description Revisions form, you can either set up the translation of any role you have defined, or you can change the role descriptions for any language. To view the descriptions for any role in all the languages it is being translated, you use the Work with Language Role Description form.

► To add a language translation to a role

1. On the Systems Administration Tools menu (GH9011), choose User Profiles (P0092).
The Work with User/Role Profiles form appears.
2. In the Work with User/Role Profiles form, choose the Roles Only option and click Find.
3. Choose a role from the detail area of the grid, and then choose Role Descriptions from the Row menu.
The Work with Language Role Descriptions form appears.
4. To add a language to a role, click Add.
The Language Role Description Revisions form appears.
5. In the Language Role Description Revisions form, complete the following fields and click OK:
 - User ID
Enter the name of the role to which you want to add a language.
 - Language
Click the visual assist to see a list of the user defined codes for each supported language.
 - Role Description



► To change a role description

1. On the Systems Administration Tools menu (GH9011), choose User Profiles (P0092).
The Work with User/Role Profiles form appears.
2. In the Work with User/Role Profiles form, choose the Roles Only option and click Find.
3. Choose a role from the detail area of the grid, and then choose Role Descriptions from the Row menu.
The Work with Language Role Descriptions form appears.
4. In the Work with Language Role Descriptions form, click Find.
5. Choose a role from the detail area of the grid and click Select.
6. In the Language Role Description Revisions form, enter a description in the following field and click OK:
 - Role Description

Security

Security

ERP 8.0 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 ERP 8.0 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 ERP 8.0.

The Security Workbench application (P00950) uses the Security Workbench table (F00950).

The User Security application (P98OWSEC) uses the ERP 8.0 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 the Security Workbench

The Security Workbench application (P00950) allows you to set up security for users, groups, and *PUBLIC. ERP 8.0 stores security information in the Security Workbench table (F00950) and caches the security information in each workstation's memory. Changes that you make as an administrator to security are applied by each workstation after the user logs out and logs back in.

You can apply various types of security. For example, you can secure a row in a database table, or you can secure processing options in a ERP 8.0 application. You can also secure objects within ERP 8.0, preventing some users from accessing forms or tables, and you can apply object-level security by user.

Understanding Users, Groups, and *PUBLIC

The ERP 8.0 security administrator can set up security for:

- **A particular user.** This option controls security by a specific ERP 8.0 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 ERP 8.0 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 ERP 8.0 Checks Security

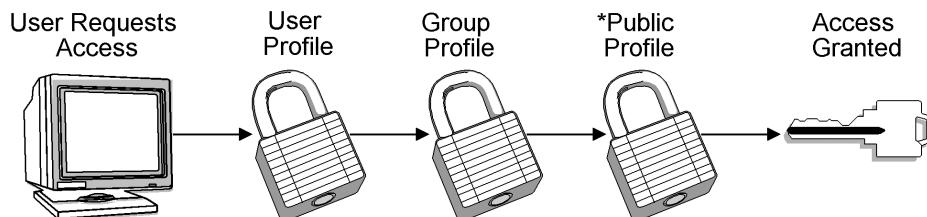
When a user attempts to access an application or perform an action, ERP 8.0 does the following:

35. Checks for any security for that particular user ID.

If security exists for that individual user ID, ERP 8.0 displays a message informing the user that they cannot proceed.

36. If there is no security for that user ID, ERP 8.0 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, ERP 8.0 lets the user continue. ERP 8.0 also provides software license security through protection codes, and requires user validation at signon and when accessing new data sources.



Understanding Cached Security Information

ERP 8.0 caches certain security information from the Security Workbench table (F00950). This information is cached in the workstation's memory cache for ERP 8.0. 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.

Tab security	Secures users from seeing a tab or tabs on a given form.
Exit security	Secures users from menu bar exits on ERP 8.0 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 ERP 8.0. These external executables, which might include design tools, system monitors, and debugging tools, are specific to ERP 8.0.
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 ERP 8.0 Object-Level Security

ERP 8.0 security is at the object level. This means that you can secure specific objects within ERP 8.0, 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), ERP 8.0 prevents them from accessing that form. Though setting up good security is always a challenge, ERP 8.0 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; ERP 8.0 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 ERP 8.0 and WorldSoftware, you need to maintain two independent sets of security profiles: one for WorldSoftware and one for ERP 8.0.

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.

User ID	Group	Menu Id	Fast Path	Address Number	Description
12386		G42314	N	12386	French Customer
4242		G42314	N	4242	Capital System
5498101			Y	5498101	
5701341			Y	5701341	
ACCT DEPT	G		Y	355151	
BD			Y	122669	
CF70				70	French Company
DEMOC2	G		Y	8447	Brown, Harvey J.
DEMOCA1	G		Y	7703	Bellas, Debbie
DEMOCA2	G		Y	7701	Holiday, Anthony
DCMOC1	O05DE001		Y	0011	Watkins, Joshua
DEMOE2	G		Y	8444	O'Malley, James
DEMOM1	G05BESS1		Y	8012	Edwards, Angela
DEMONS1	G05BESS1		Y	8015	Kilmer, Jessica
DEMONS2	G		Y	7554	Stewart, Kevin
DEMOW1	G05BESS1		Y	8014	Anderson, Jeanette
DEMOW2	G		Y	7550	Fuentes, Jason
DEVUSERD			Y	7261	

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 "Cost Center" for the Business Unit/Branch Plant field, or "Company" for the Company Name. Column security can apply to dictionary items that are not in database tables.

Working with Security Workbench

The Security Workbench application (P00950) allows you set up security for applications, actions, processing options, and so on. You can set up security for users or groups.

See Also

- ❑ *Working with the Object Configuration Manager* in the *CNC Implementation Guide* for information about securing the query by example row
- ❑ *Setting Up User Profiles* in this guide for information about securing the fast path tool

Setting Up Application Security

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 unsecured to secured, and how to set security for all but one form in an application.

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.

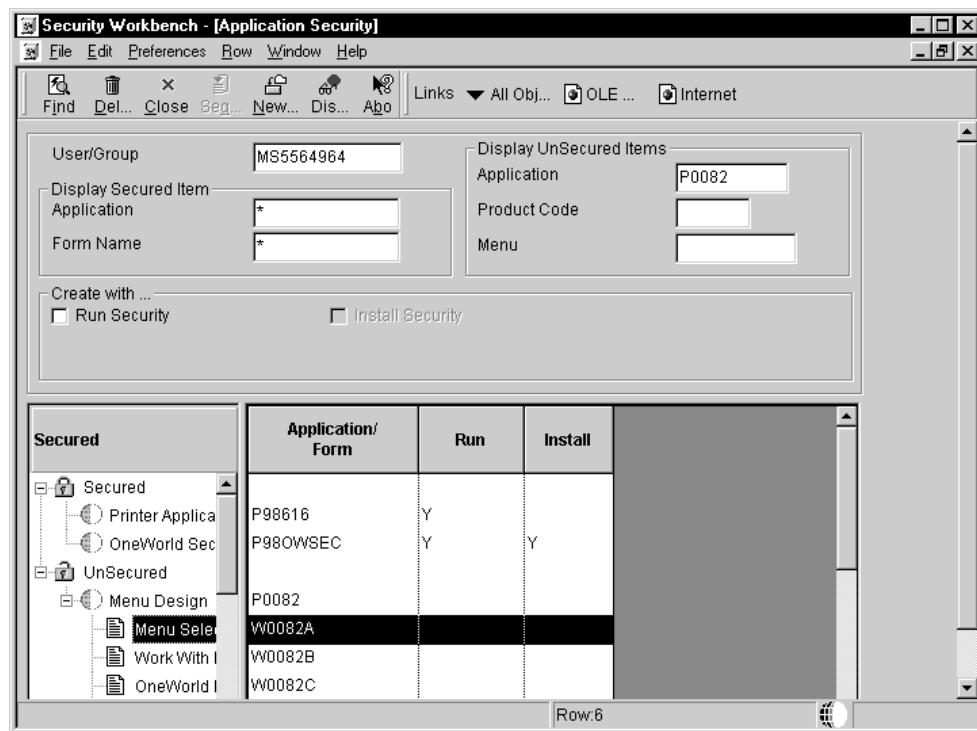
► To set up application security

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.

- 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* ERP 8.0 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
- Change
- Delete

► **To add security to an application**

1. 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.
2. 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.

► **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.

Securing Users to a Form in an Application

You might want to restrict one or more users to accessing a single form in an application. These users are otherwise restricted from using the application.

To accomplish this, you create a security record for the form you want to allow users to access, and then create a security record that prevents users from accessing any other forms in the application.

► To secure users to a form in an application

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).
The Work with User/Group Security form appears.
2. In the User/System Role field, enter a user or role ID and click Find.
3. Choose a row displaying Application Security in the Description column and click Select.
The Application Security form appears.
4. In the Application field, under Display UnSecured Items, enter the name of an application and click Find.
5. Expand the UnSecured node and any child nodes to see the forms for the application.

The names of the application forms appear.

6. Click the name of the form you want users to see and drag it to the Secured node.
-

Note:

Leave the Run Security and Install Security options unchosen. This will allow users to see the form.

7. Click the Find button.
 8. Expand the UnSecured Node and choose the application you want to secure.
 9. Choose the Run Security option to prevent users from accessing the application unless they want to run the unsecured form.
-

Caution:

Do not choose the Install Security option. Doing so will prevent just in time installation (JITI) of anything necessary to run the application.

After you complete these steps, users you have secured can access only the unsecured form in the application. If a user tries to access a secured form in the application, an error message appears.

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.

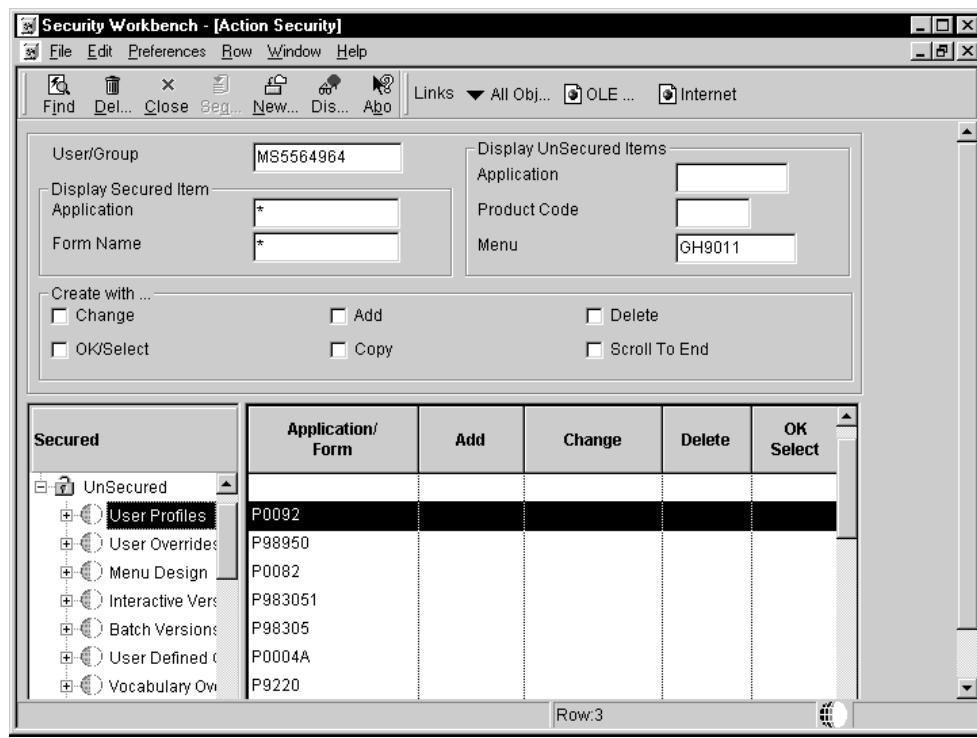
► To set up action security

1. On the Security Maintenance menu (GH9052), choose Security Workbench (P00950).

The Work with User/Group Security form appears.

- From the Form menu, choose Set Up Security, and then choose Action.

The Action Security form appears.



- 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.

- 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 actions as necessary to add, change, or remove action security.

- Add
- Change
- Delete

► **To add action security**

Under the Create With heading

1. Click any of the following options:

- Change
- Add
- Delete
- OK>Select
- Copy
- Scroll To End

2. After choosing one of the options, 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.

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.

The applications or forms now appear under the Secured node with the appropriate action security.

► **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 effect 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. ERP 8.0 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, ERP 8.0 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.

Before you set up row security for an item on a table, you should first check to make sure the item is actually in that table. For example the Address Book Master table (F0101) contains the data item AN8. Therefore, you can set up row security on that item. However, the same table does not contain data item PORTNUM. Setting row security on this item for the F0101 table will have no effect.

You set up row security on a table, not on a business view. You should make sure that the object you want to secure uses a business view over a table containing the object. For example, the application Work with Environments (P0094) uses business view V00941 over the Environment Detail table (F00941). You could secure the data item RLS (Release) because it is in the F00941 table. On the other hand, the same item is not in the F0094 table. If you attempt to secure the item on the F0094 table, data item RLS is not secured.

Note:

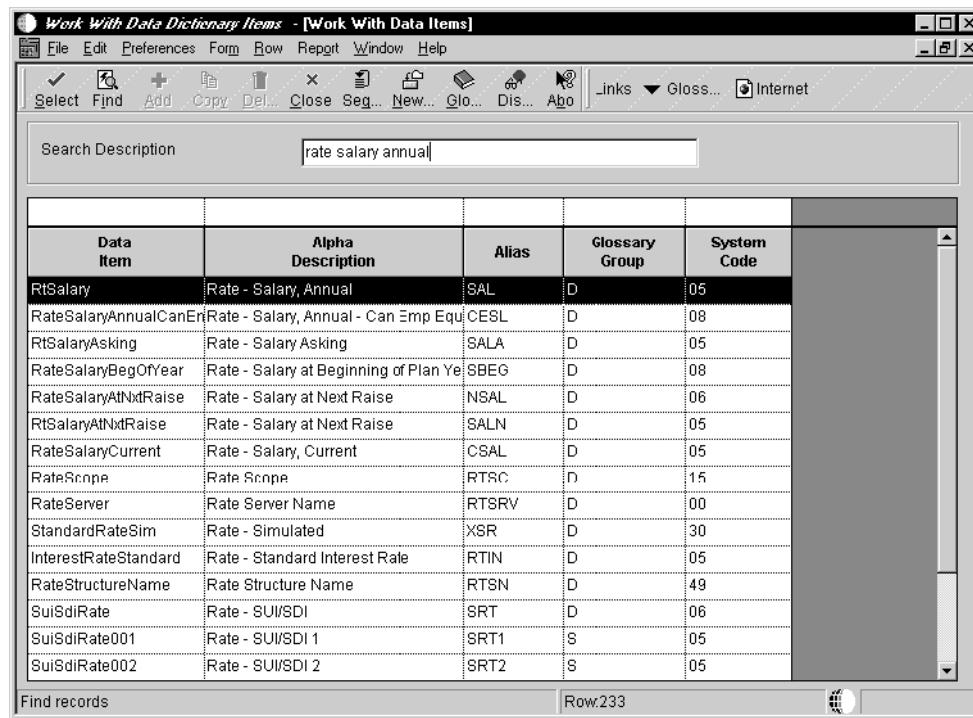
You can find the tables, applications, forms, business views, and so on, that use a data item by launching the Cross Reference application (P980011) after you build cross reference tables (F980011 and F980021).

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.

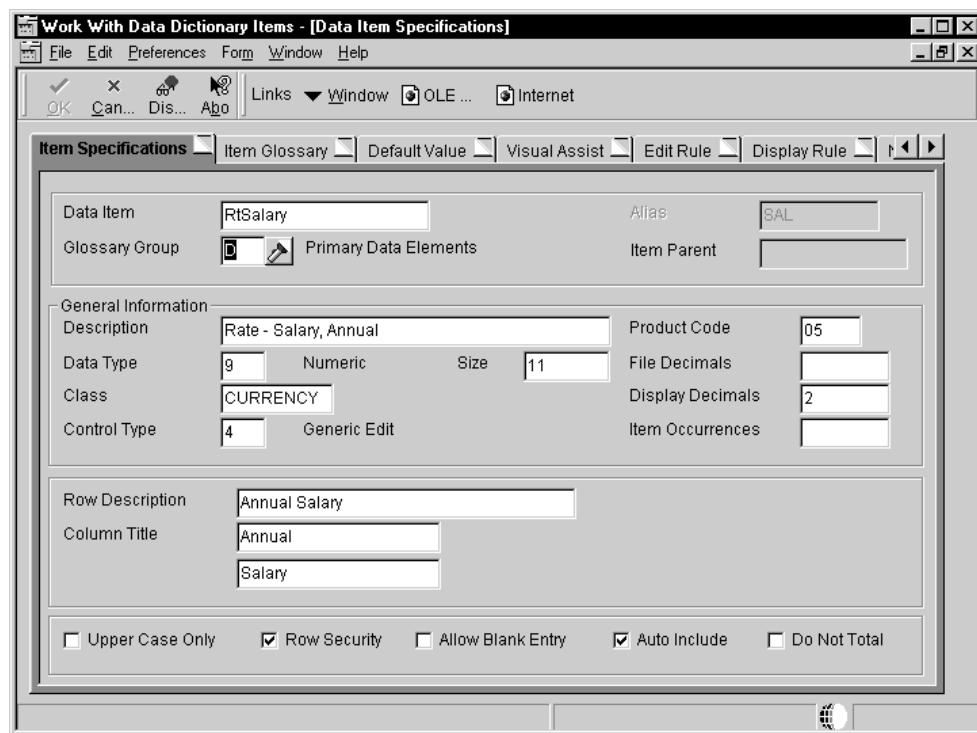


2. Click Find, choose a data item that you want to secure and click Select.

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.

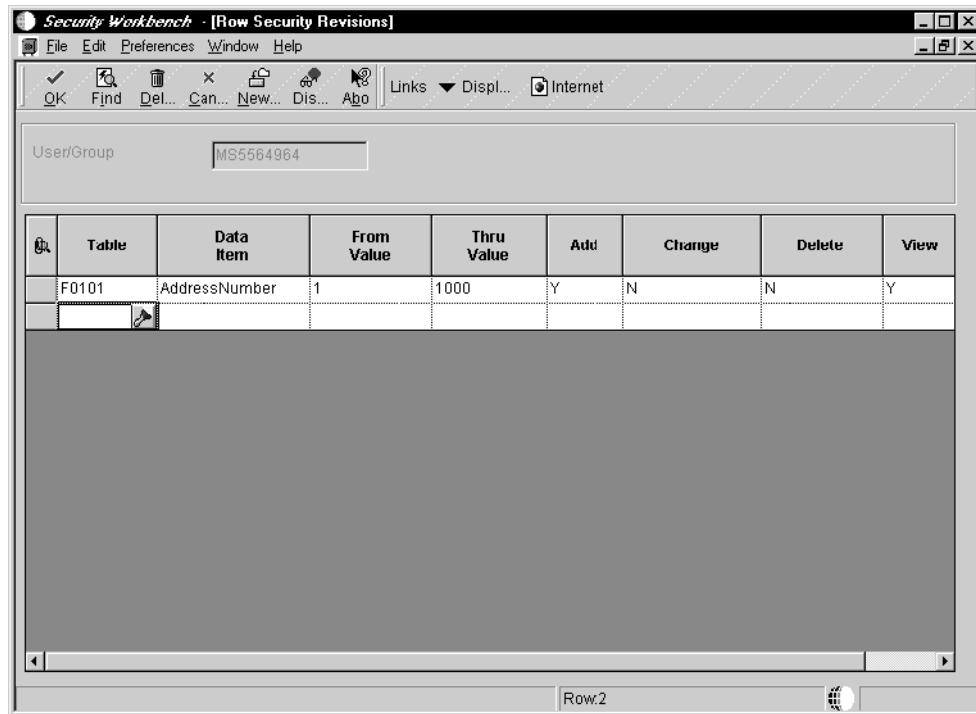
This option must be turned on for row security to work.

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.



6. 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, ERP 8.0 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.

Note:

You can find the tables, applications, forms, business views, and so on, that use a data item by launching the Cross Reference application (P980011) after you build the cross reference tables (F980011 and F980021).

You can set up column security on a table, an application, or a form.

Setting Up Column Security on a Table

When you set up column security on a table, consider the following:

- Make sure that the object that you want to secure is actually in the table.
- Make sure that the object that you want to secure is part of an application that uses a business view over a table containing the object.
- Make sure that the object that you want to secure uses a business view that includes the column containing the object.

For example, if you want to apply column security to data item RLS (Release Number) in the Environment Detail table (F00941), RLS must be an item in that table, and it must also be part of an application using a business view over that table. Finally, the business view over the F00941 table must include a column containing the data item RLS.

If all of these conditions are met, you can successfully apply column security to the data item. Setting column security on a table also means that you set security on the data item for any other applications that use the F00941 table.

Setting Up Column Security on an Application

When you set up column security on an application, consider the following:

- Make sure that the object that you want to secure is actually in the application.
- Make sure you secure the correct data item in an application, because descriptions can be very similar, if not identical, for different data items.

For example, if you want to apply column security to data item UGRP (UserGroup) in the Object Configuration Manager application (P986110), you first make sure that the item is in the application. Because it is, you can apply security to the data item. However note that data items UGRP, MUSE, USER, and USR0 all contain the identical data description User ID. Verify the item by its alias, not by its data description.

Applying column security on an application means that even if an application uses a business view that does not contain the data item you want to secure, you can still secure it, as long as the item appears on forms in the application.

Setting Up Column Security on a Form

When you set up column security on a form, consider the following:

- Make sure that the object that you want to secure is actually on the form.
- Make sure you secure the correct data item in a form, because descriptions can be very similar for different data items.

Applying column security on a form means that even if the form uses a business view that does not contain the data item you want to secure, you still secure it, as long as the item appears on the form.

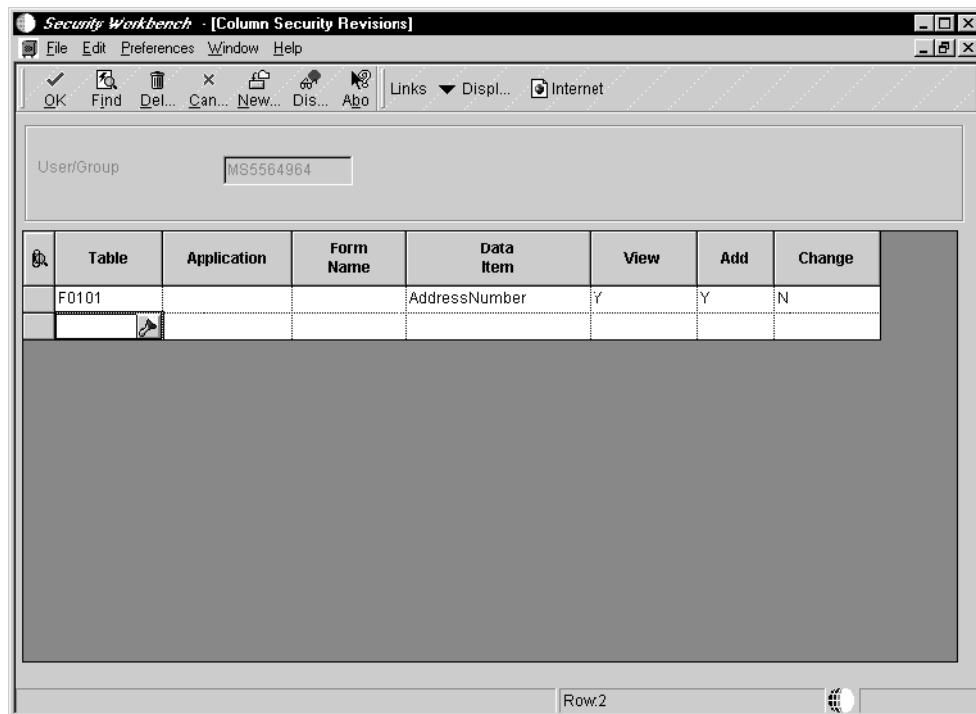
► To set up column security

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, ERP 8.0 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.

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.

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.

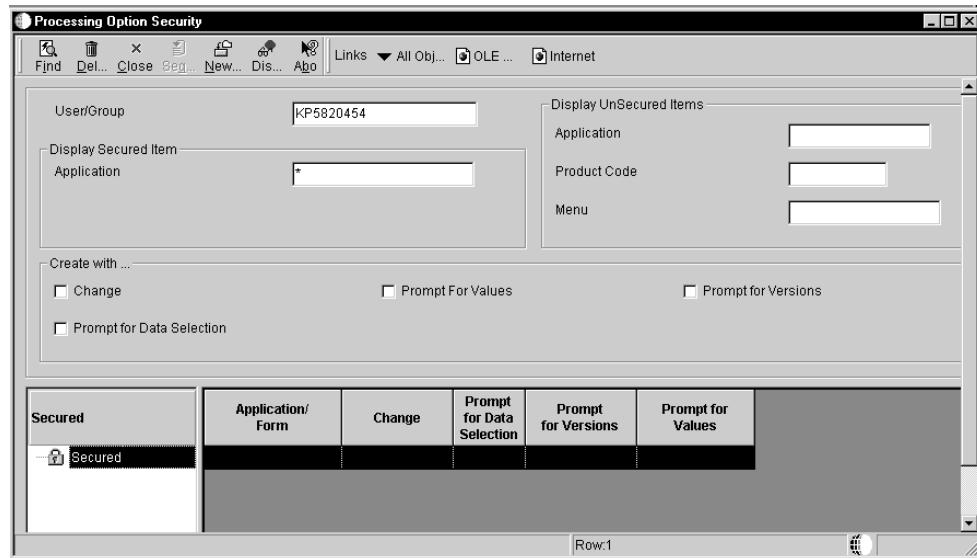
► To set up processing option security

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 actions as necessary to add, change, or remove processing option security.
 - Add
 - Change
 - Delete

► **To add security to processing options**

1. 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
 - OK Select
2. 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.

► **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
 - OK>Select

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.

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.

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.

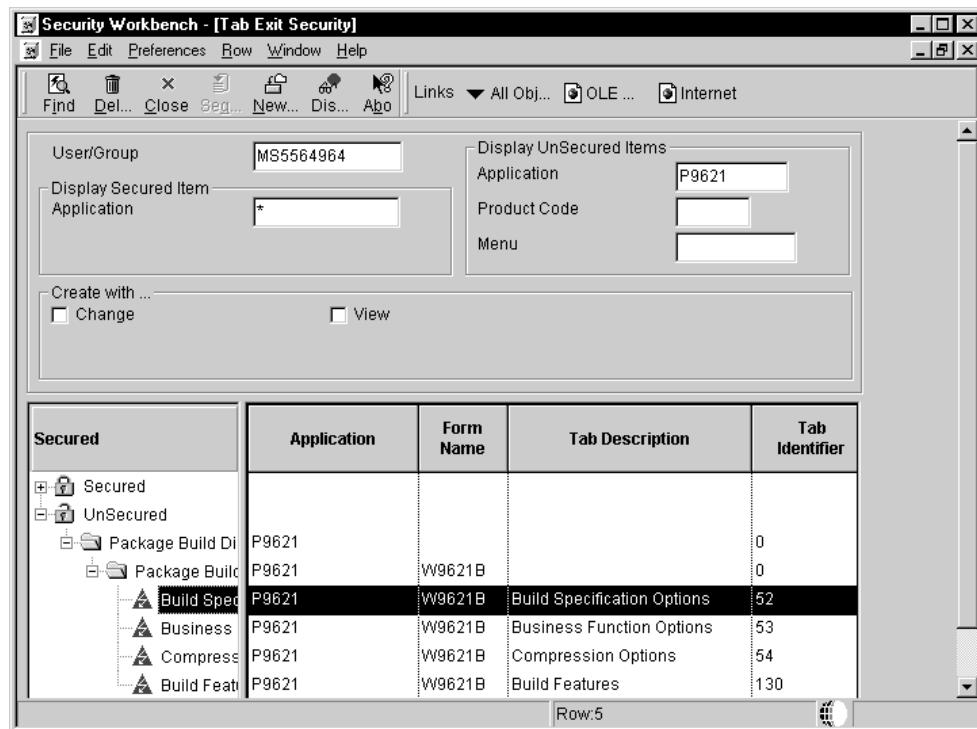
► To set up tab security

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* ERP 8.0 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 actions as necessary to add, change, or remove tab security

- Add
- Change
- Delete

► 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.

► 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
 - Change

Click this option to prohibit a user or group from changing the name of the tab.

- View
 - 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

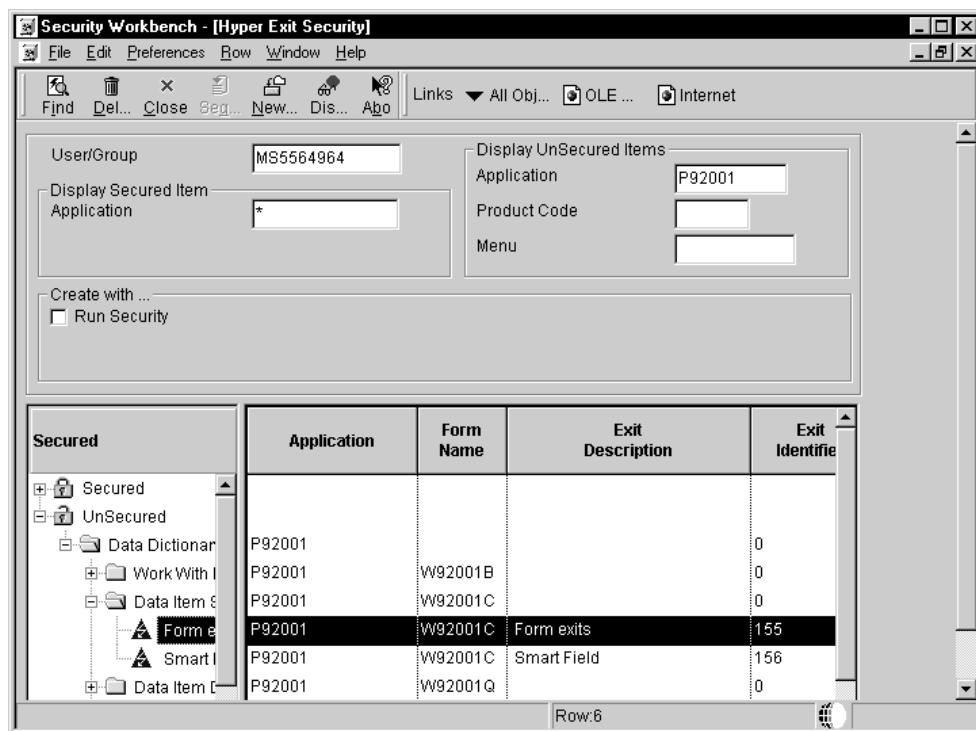
This task describes how to add, change, and remove security for the menu bar exits on ERP 8.0 forms. These exits call applications and allow users to manipulate data. Exit security also provides restrictions for the hyper-button.

► 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 actions as necessary to add, change, or remove exit security.

- Add

- Change

- Delete

► 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.

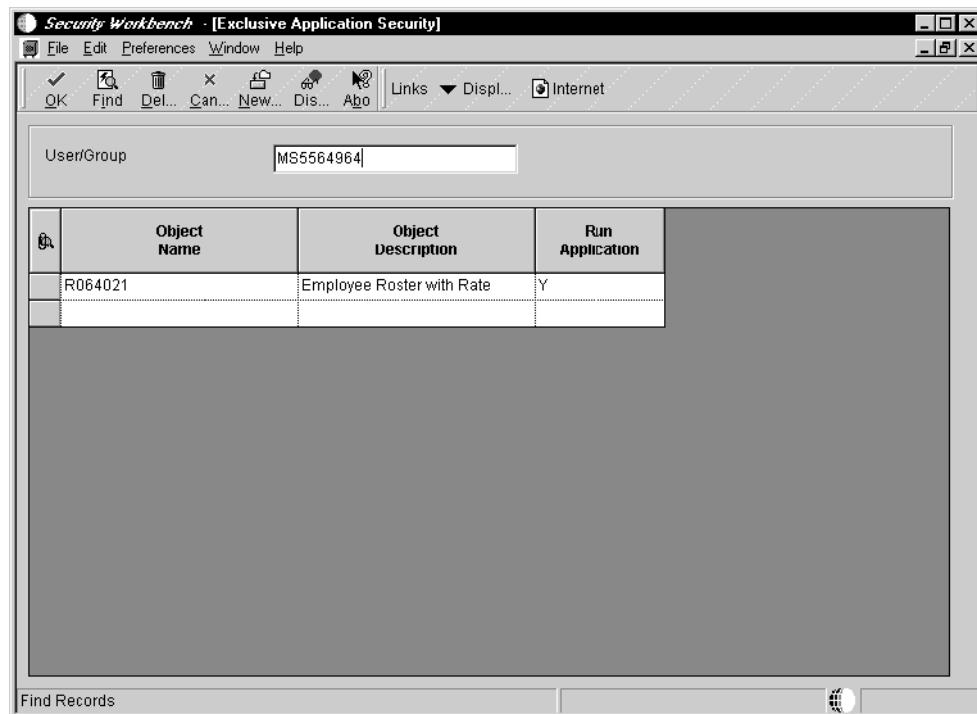
Setting Up Exclusive Application Security

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. ERP 8.0 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, ERP 8.0 does not save the deletion.

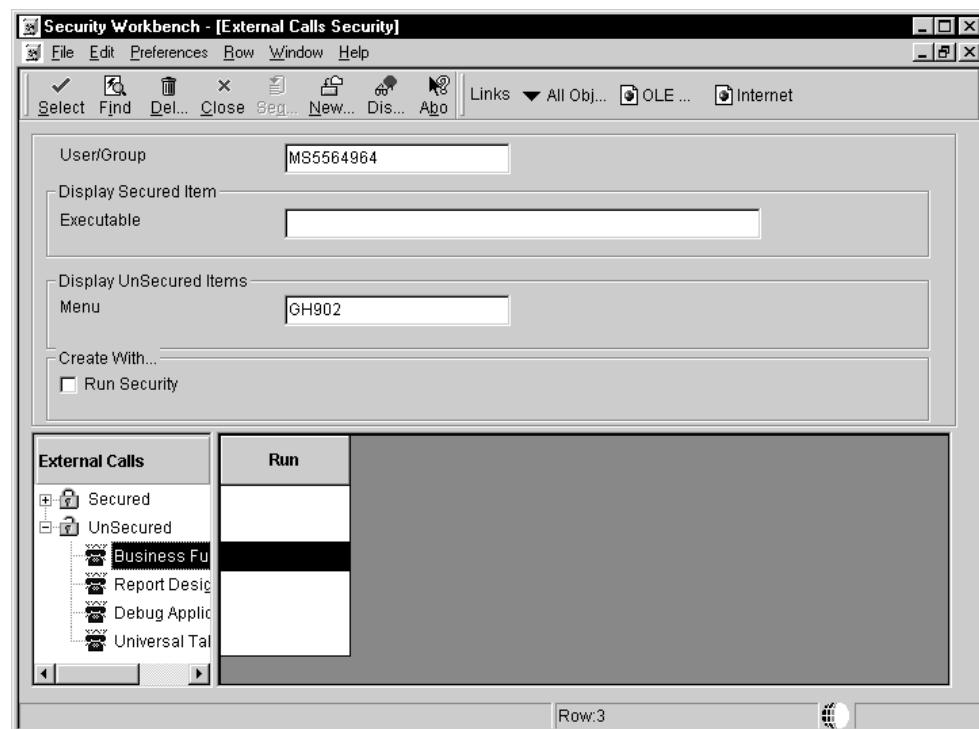
Setting Up External Calls Security

This task describes how to secure users and groups from access to external call applications. In ERP 8.0, certain applications exist that are not internal to ERP 8.0; 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.

- Executable

Enter the name of the external application, such as debugger.exe. When you enter information into this field, ERP 8.0 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

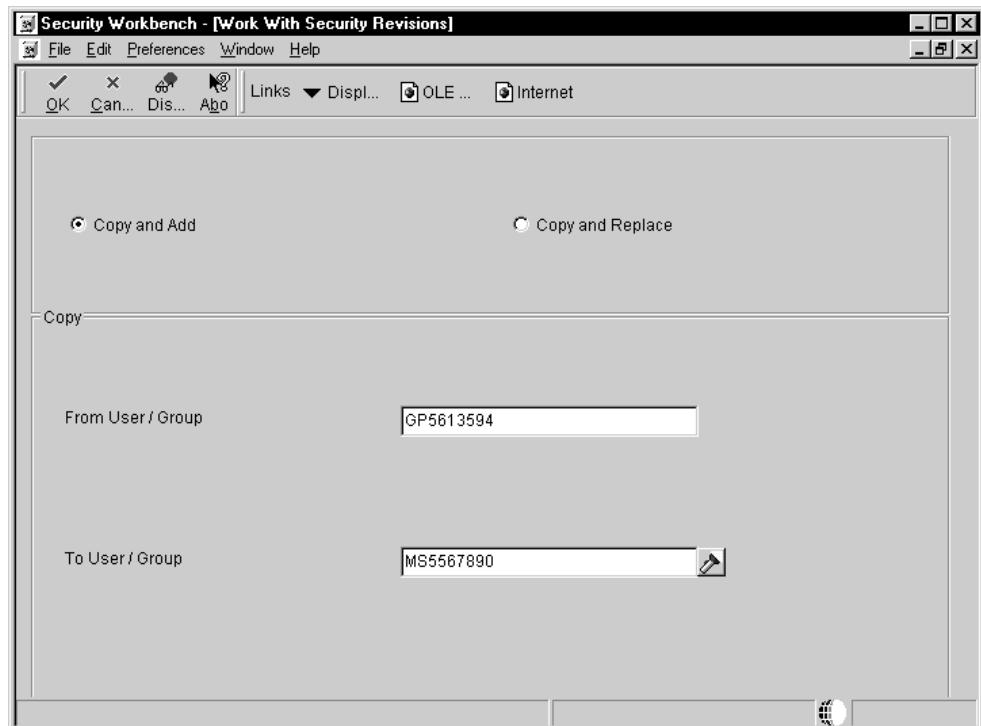
Do one of the following:

- 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.

► 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, ERP 8.0 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

ERP 8.0 saves the security information and returns you to the Work with User/Group Security form.

•

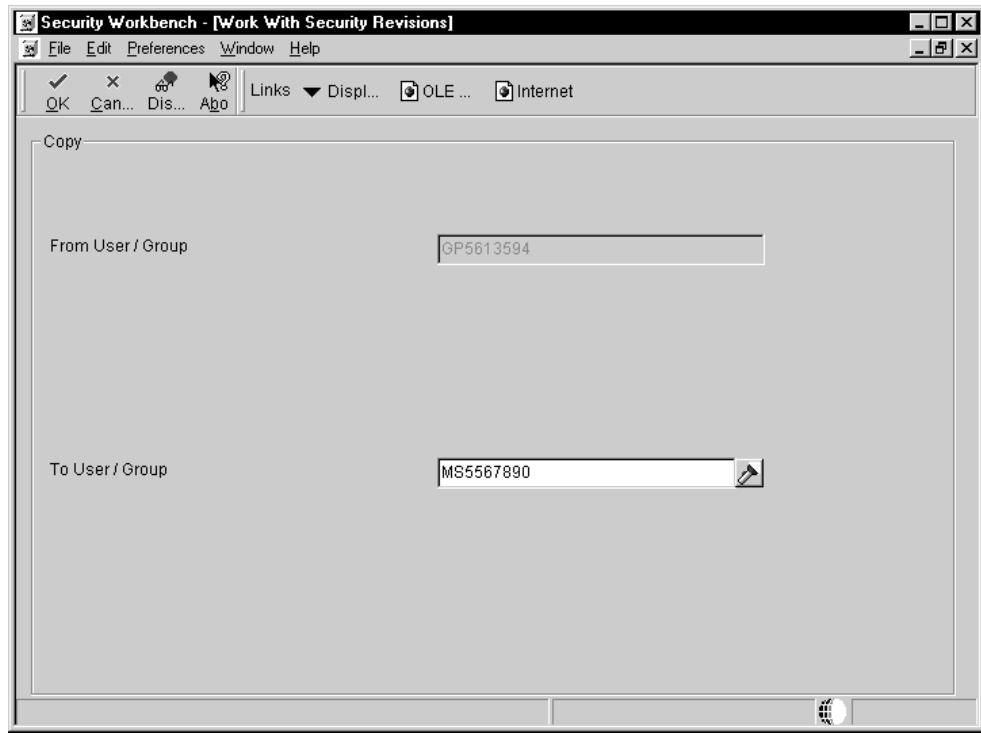
Copying Security for a User or a Group

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 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

ERP 8.0 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

ERP 8.0 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
ERP 8.0 User	The user ID used to sign on to ERP 8.0.
ERP 8.0 Password	The user's password that ERP 8.0 validates when signing on to ERP 8.0.
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 ERP 8.0 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 ERP 8.0.
Last Change	The date that the ERP 8.0 password was last changed.

You must define a security record for each ERP 8.0 user either by group or individual. J.D. Edwards recommends that you map multiple ERP 8.0 users to the same system user. For example, each user can use the same system user that ERP 8.0 uses to connect to ERP 8.0 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 ERP 8.0 to simplify signon security. When you set up unified logon for ERP 8.0, ERP 8.0 uses Windows NT Authentication to verify ERP 8.0 security. This verification allows ERP 8.0 signon security to use the network signon information that a user supplies when signing on to Windows; ERP 8.0 does not require the user to enter another user ID and password when signing on to ERP 8.0.

Security Table Access

Provided that you keep the system user and password secure, no users have direct access to the ERP 8.0 Security table (F98OWSEC). The exception to this is for ERP 8.0 system administrators who maintain the security information. The ERP 8.0 security server has access to the ERP 8.0 Security table (F98OWSEC) through JDENet.

You must perform all validation and changes of ERP 8.0 passwords through a JDENet message to the enterprise server with the security table. Upon validating a ERP 8.0 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 ERP 8.0 Security table (F98OWSEC). You should also assign ERP 8.0 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 ERP 8.0 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 ERP 8.0 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, ERP 8.0 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. ERP 8.0 stores the actual password on the security server in the ERP 8.0 Security Table (F98OWSEC) within a binary object. ERP 8.0 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 ERP 8.0 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
 - ERP 8.0 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 ERP 8.0 security database requires a unique user ID.

- Verify and modify the jde.ini file on your ERP 8.0 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 ERP 8.0 [SECURITY] settings.
- If you use unified logon with your ERP 8.0 security, set up a unified logon server for each instance of ERP 8.0 on each server. For example, if you have an NT server with multiple releases of ERP 8.0, you need a unified logon server for each release on the server.

The unified logon server differentiates between instances of ERP 8.0, based on the port numbers for these instances. For example, if the port number for ERP 8.0 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 ERP 8.0 Sign On Security

ERP 8.0 provides sign on security with an architecture designed to provide user security for ERP 8.0 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 ERP 8.0 applications to view and change data.

The following text explains the process flow for standard sign-on security:

- ERP 8.0 workstations sign on to ERP 8.0 using their ERP 8.0 user ID and password. These workstations can be networked or stand-alone workstations, laptop computers, or other ERP 8.0 hosts.

If you enter a valid user ID and password, as validated against the local ERP 8.0 installation, the start-up process continues.

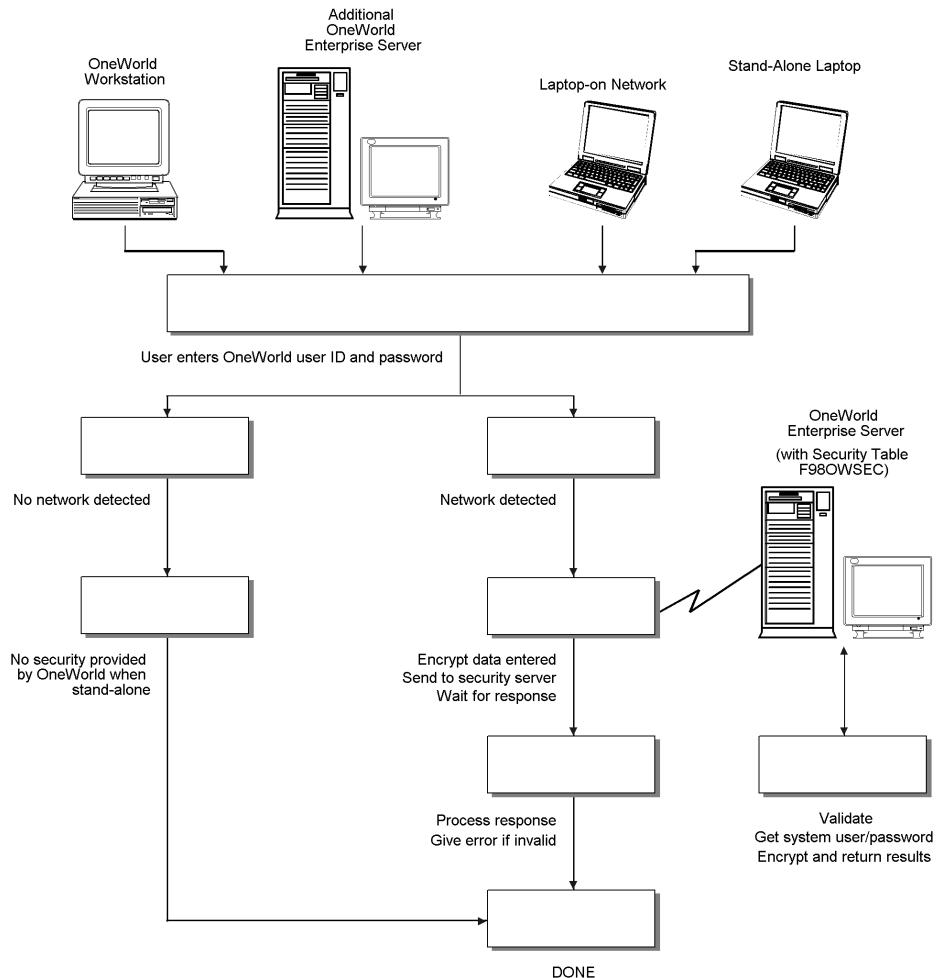
- As ERP 8.0 starts up, it tries to detect an operational network environment.

If a network is not detected, ERP 8.0 allows local operation in a store-and-forward mode. Because the workstation or laptop computer is not connected to a network nor a ERP 8.0 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, ERP 8.0 encrypts the password information and sends it over the network to the ERP 8.0 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, ERP 8.0 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 ERP 8.0 signon security:



The following text explains the process flow for sign-on security with a unified logon:

- A user starts up ERP 8.0 on a workstation.
- ERP 8.0 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 ERP 8.0 enterprise server.
- The ERP 8.0 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 ERP 8.0 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:

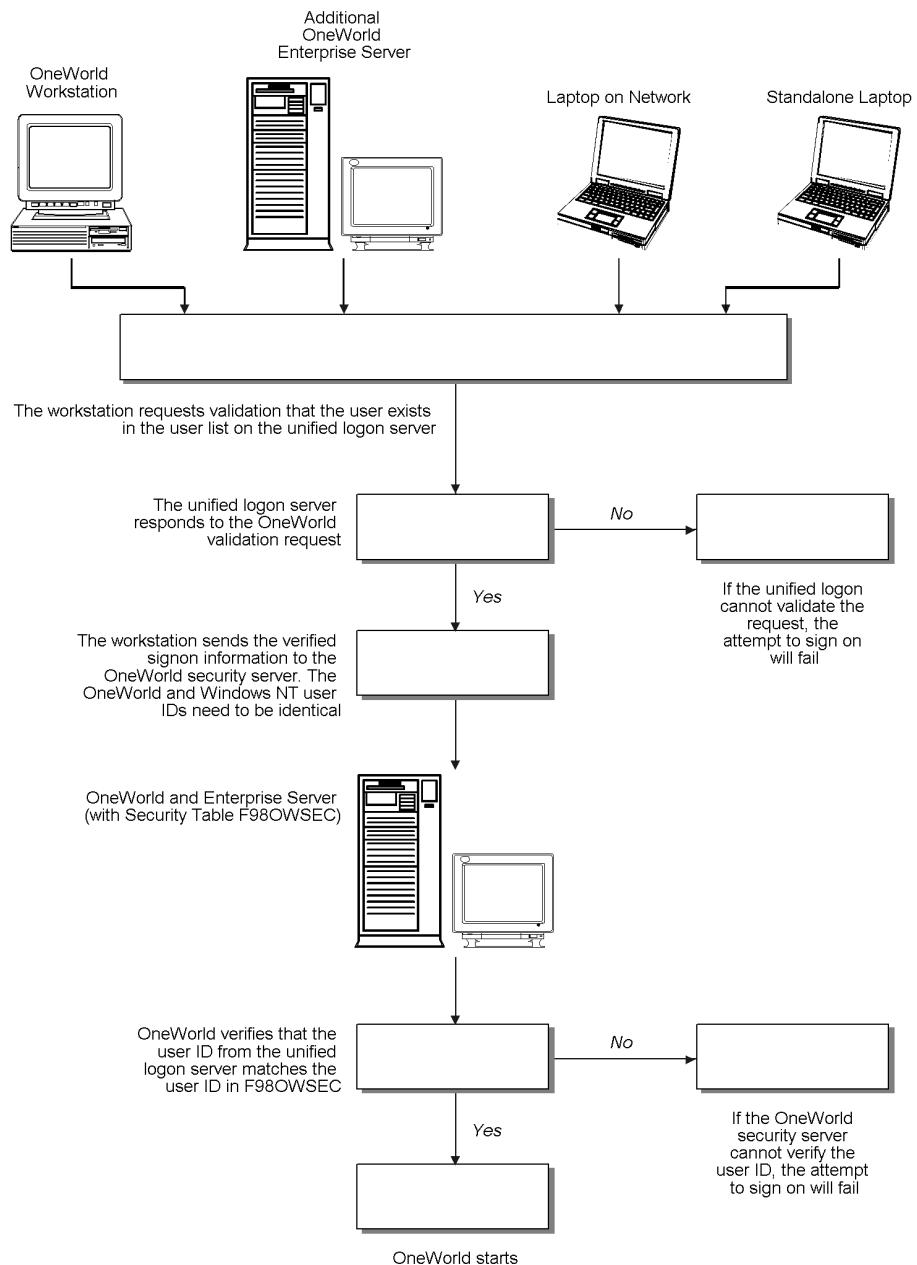
```
[ SECURITY ]
```

```
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 ERP 8.0, the Environment Selection form appears and allows the user to choose an environment. This is the default setting for ShowUnifiedLogon. |

The following illustration shows the process flow for unified logon:



Signon Security for Web Users

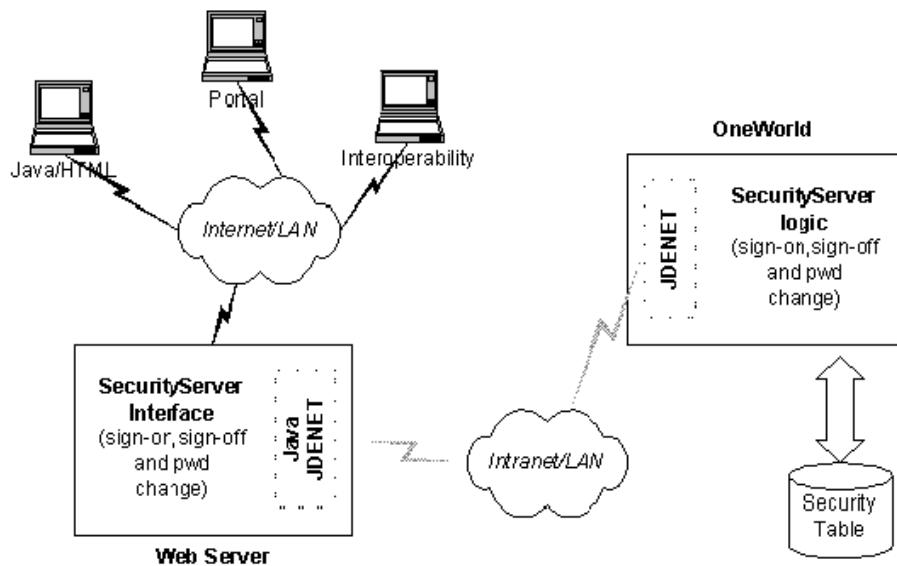
Java/HTML, Portal, and Interoperability users who sign on to ERP 8.0 across the internet to the JAS security server are authenticated by the ERP 8.0 security server and the F98OWSEC table. The JAS security server acts as an interface between the web user's client workstation and the ERP 8.0 security 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 ERP 8.0 security server, which in turn accesses the

F98OWSEC table. The ERP 8.0 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 ERP 8.0 security server.

The following graphic shows a process flow model for ERP 8.0 signon security with unified logon for web users:



As the security middleman, the JAS security server handles the following tasks:

- Connects to the ERP 8.0 security server for user security authentication and password when a web user signs on.
- Fails over to a secondary ERP 8.0 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 ERP 8.0, 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 ERP 8.0 security server.
- Keeps a valid user session open until the user signs off or the ERP 8.0 session expires.

To the ERP 8.0 web user, signon and signoff look the same as they would to a ERP 8.0 user on a Windows NT, UNIX, or AS/400 platform.

To set up security for web users through the ERP 8.0 security server, you add the following parameters to those already existing in the jas.ini file:

[SECURITY] parameter	Parameter value in jas.ini file
NumServers	The total number of ERP 8.0 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:

```
NumServers=3
SecurityServer=JDED
SecurityServer1=JDEC
SecurityServer2=corowhp2
UserLogonCookie=TRUE
#CookieLifeTime unit is "day"
CookieLifeTime=7
```

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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 applications to view and change data. J.D. Edwards uses an encryption algorithm to ensure that applications other than ERP 8.0 security cannot access passwords transmitted across the ERP 8.0 network.

You can also set up a unified logon server for a ERP 8.0 server. The unified logon server enables ERP 8.0 to use the domain logon information to determine user security for ERP 8.0; in a ERP 8.0 unified logon scenario, a user only needs to enter a user ID and a password at network 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 ERP 8.0 users. Typically, users within a specific role use similar security information.

You should keep user security simple. Managing ERP 8.0 user IDs and system (database) user IDs can become complicated quickly. The simplest way to set up user security is to have all ERP 8.0 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, ERP 8.0 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 ERP 8.0 application, ERP 8.0 searches for a security record for that user and that specific data source where the table resides. If ERP 8.0 does not find a specific record, then ERP 8.0 uses the default data source, which would be the security record that you created with the DEFAULT data source field.

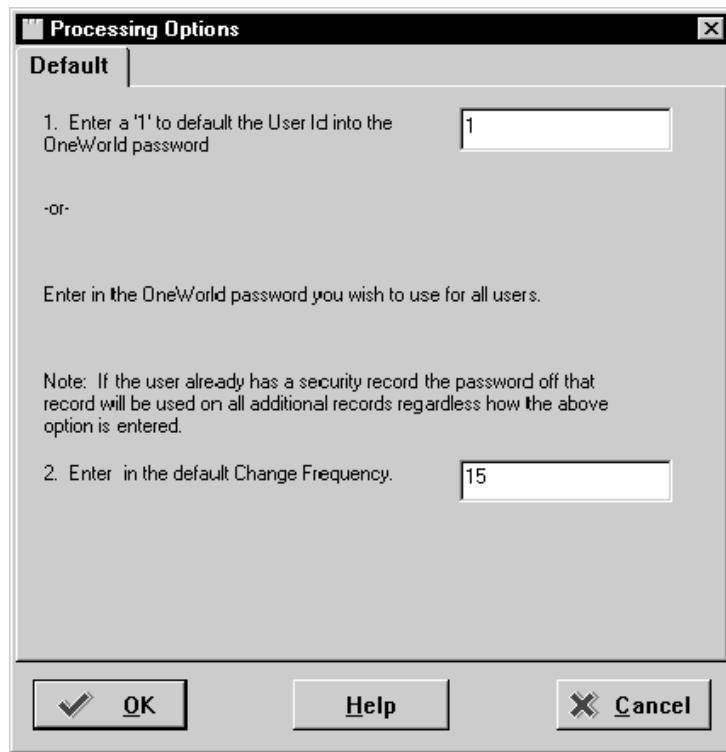
You use system user IDs to manage user access to databases. Although you should try to maintain as few system user IDs as you can, occasions will arise that require you to set up database security in addition to the ERP 8.0 object and user security for specific users and specific tables. For example, 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](#).

Setting P

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:



Default

1. Enter a '1' to default the User Id into the OneWorld password

-or-

Enter in the OneWorld password you wish to use for all users.

Note: If the user already has a security record the password off that record will be used on all additional records regardless how the above option is entered.

2. Enter in the default Change Frequency.

-
- 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.

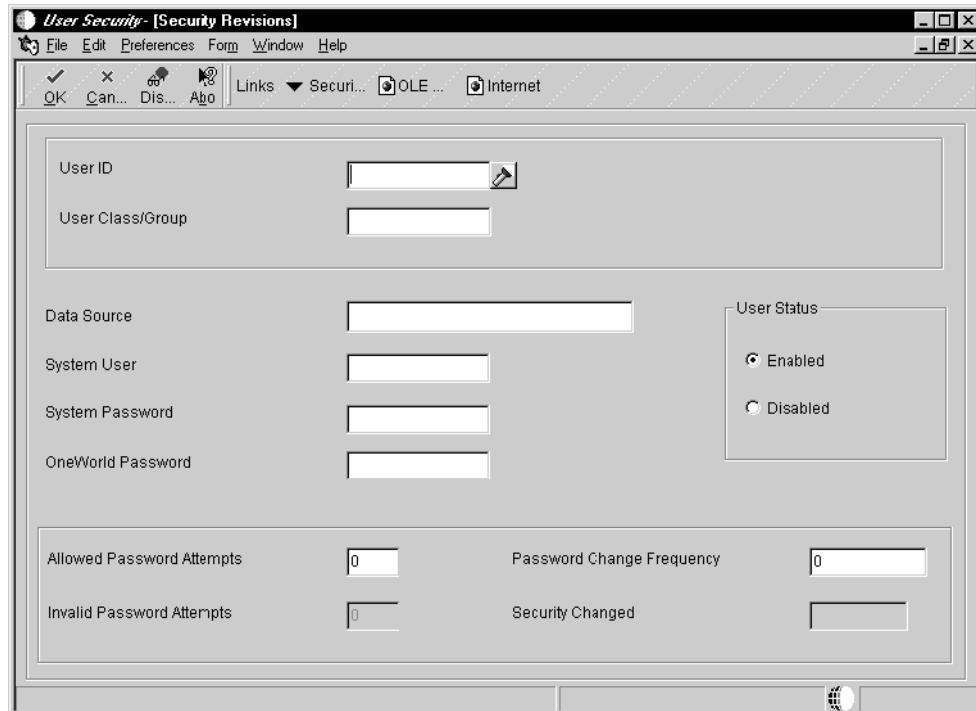
► To create user security

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 ERP 8.0 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. ERP 8.0 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, ERP 8.0 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 ERP 8.0 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 ERP 8.0. This option is the default setting when you create user security.

- Disabled

With User Status disabled, security prohibits the user from signing on to ERP 8.0.

Note:

If a user commits a security violation, such as exceeding the maximum number of allowed password attempts, ERP 8.0 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 ERP 8.0. 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 ERP 8.0 password for users, complete the following fields:

- Allowed Password Attempts

Enter the number of invalid password attempts allowed before ERP 8.0 disables access for the user.

- Password Change Frequency

Enter the number of days until ERP 8.0 requires the user to change his or her password.

7. Click OK to save the current user security information.

When you create group security, ERP 8.0 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 ERP 8.0 Signup Passwords* for more information.

8. When you finish, click Cancel.

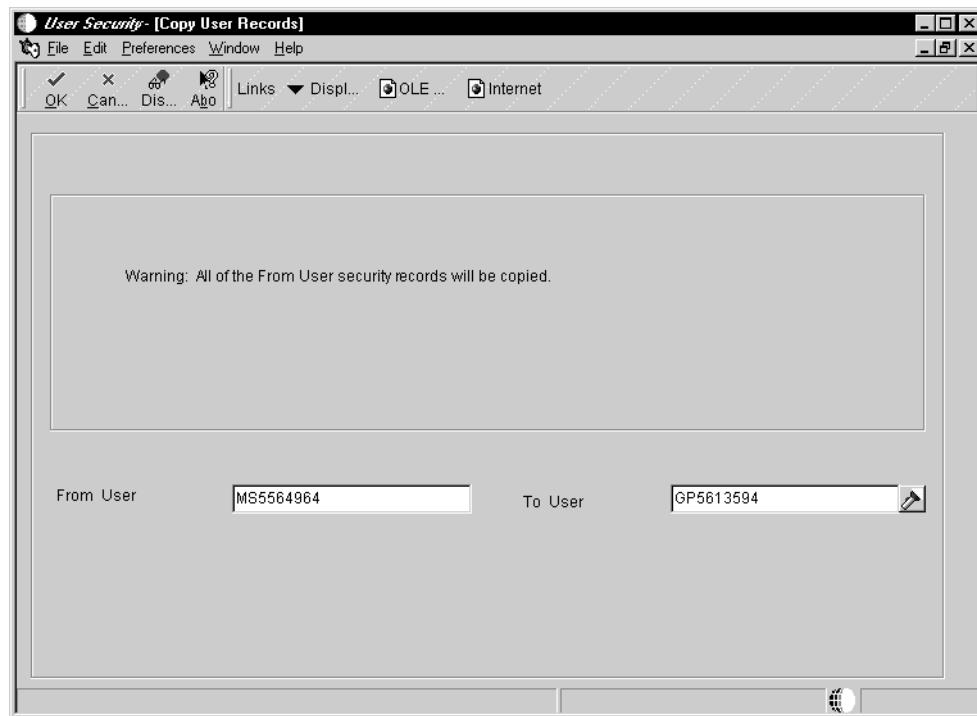
► **To copy user security**

Note:

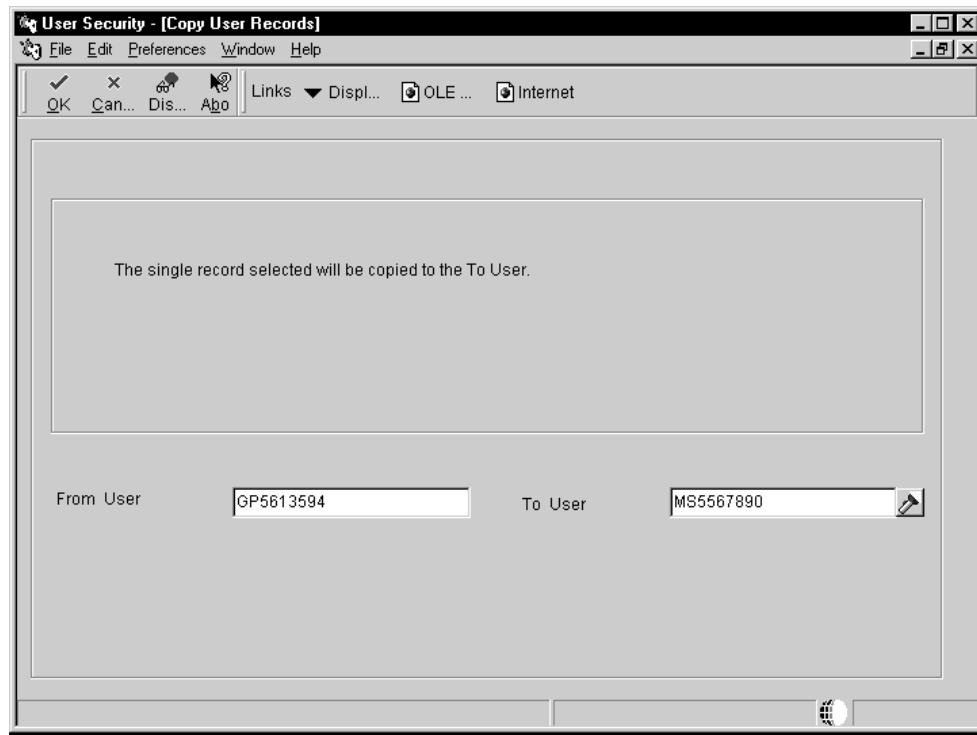
J.D. Edwards recommends that you create a "model" user with security information that you can copy to create other ERP 8.0 users. Typically, users within a specific group use similar security information.

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.

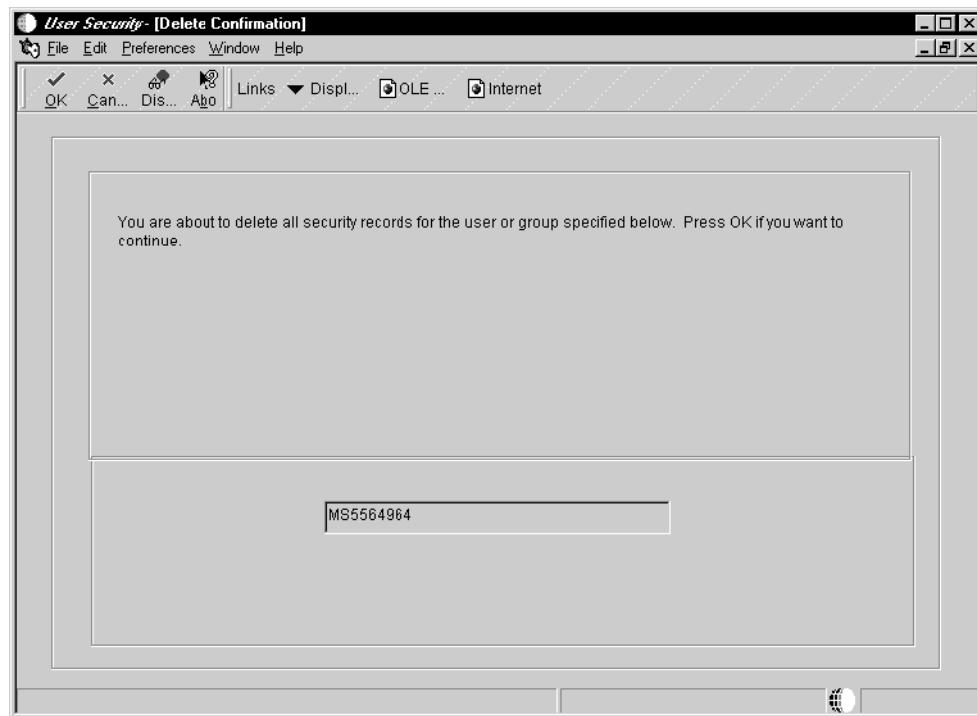
- Password Change Frequency
- Allowed Password Attempts

► **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:

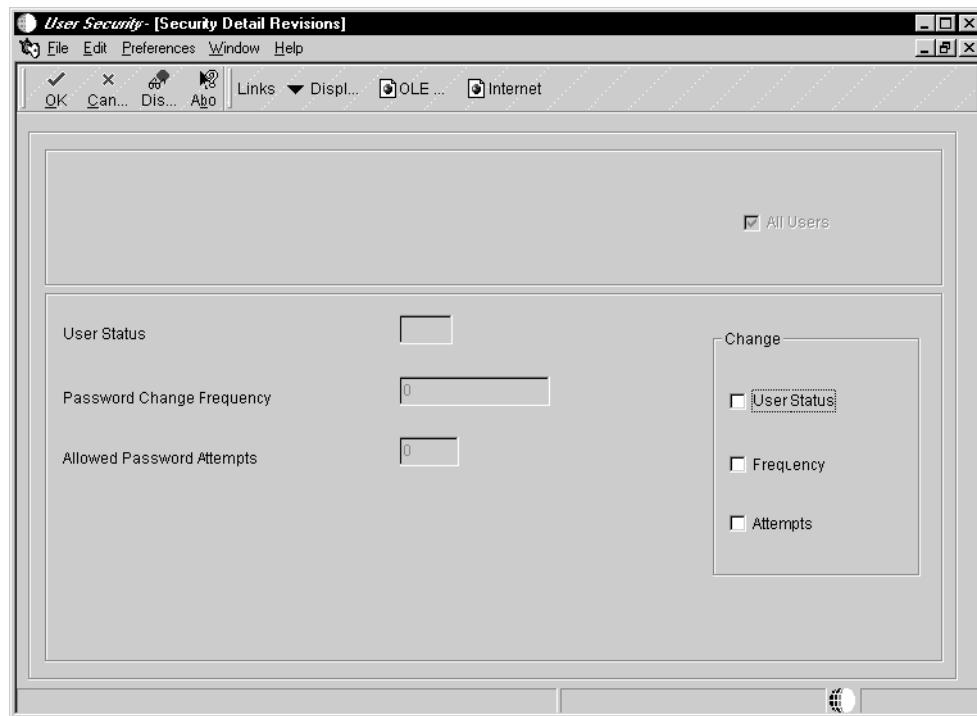
If you choose a record from the detail area and click Delete, you will remove the data source for the user, and not remove user security.



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:

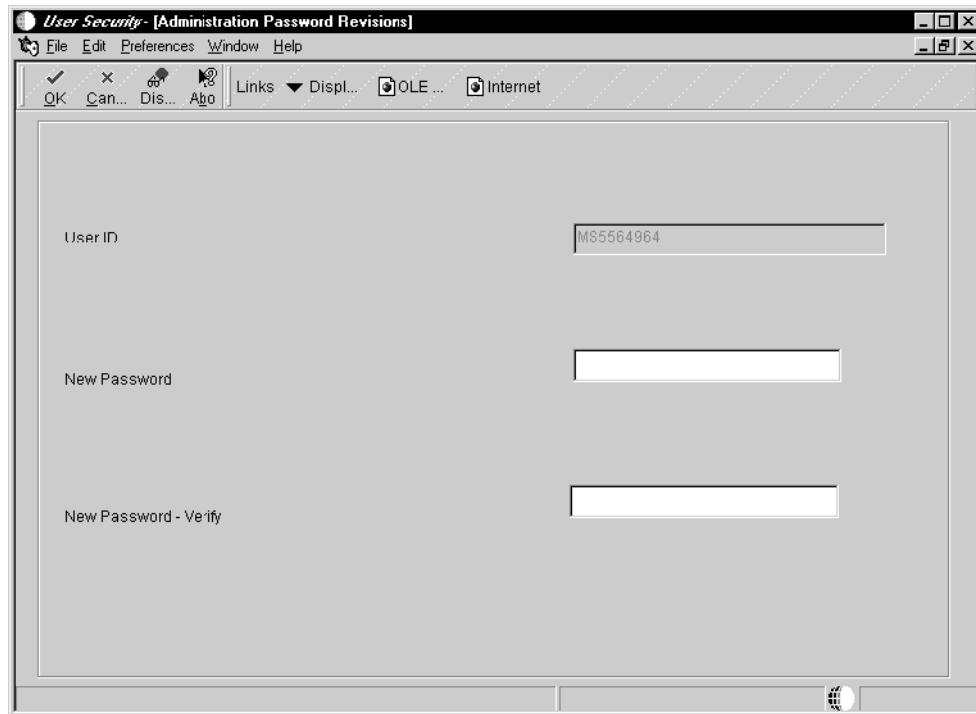
- User Status
This field allows you to enable or disable user profiles.
- Password Change Frequency
- Allowed Password Attempts

► **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, ERP 8.0 does not restrict your password choices. Any password is valid.

- New Password - Verify

See Also

- ❑ *Changing Your User Options* in the *ERP 8.0 Foundation* guide for details on how to change a password at the end-user level

Reviewing Security History

If you know the specific user or group, you can review the user's or group's security history using the User Security (P98OWSEC) application. 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.

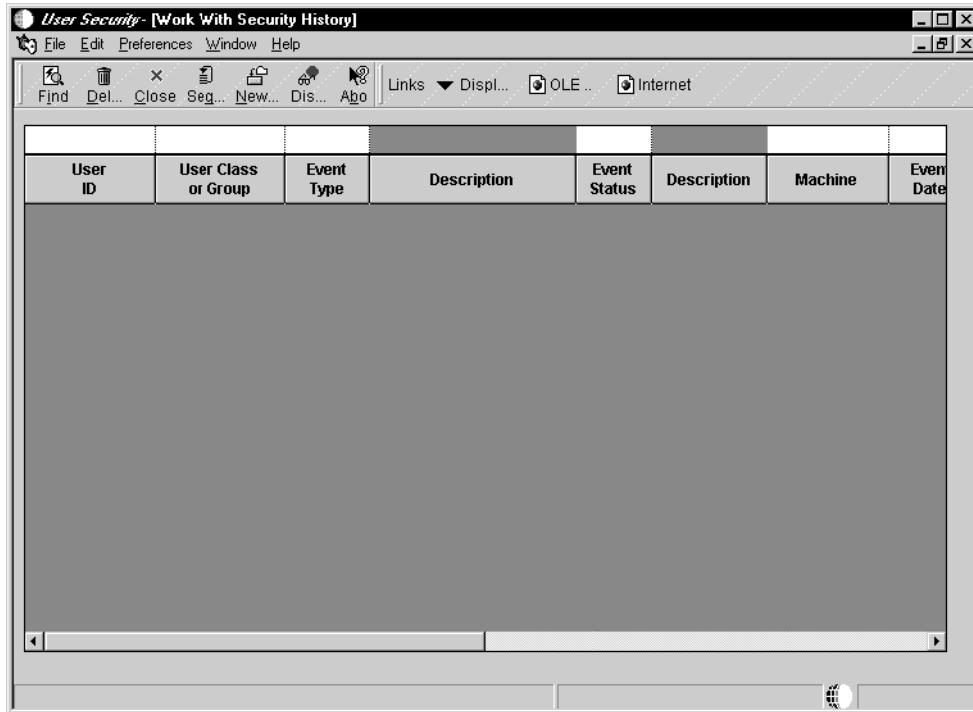
Before You Begin

- ❑ The [SECURITY] section in your server jde.ini must include the following setting for ERP 8.0 to record security history:

```
[ SECURITY ]  
History=1
```

► To review security history

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.
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 ERP 8.0 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.

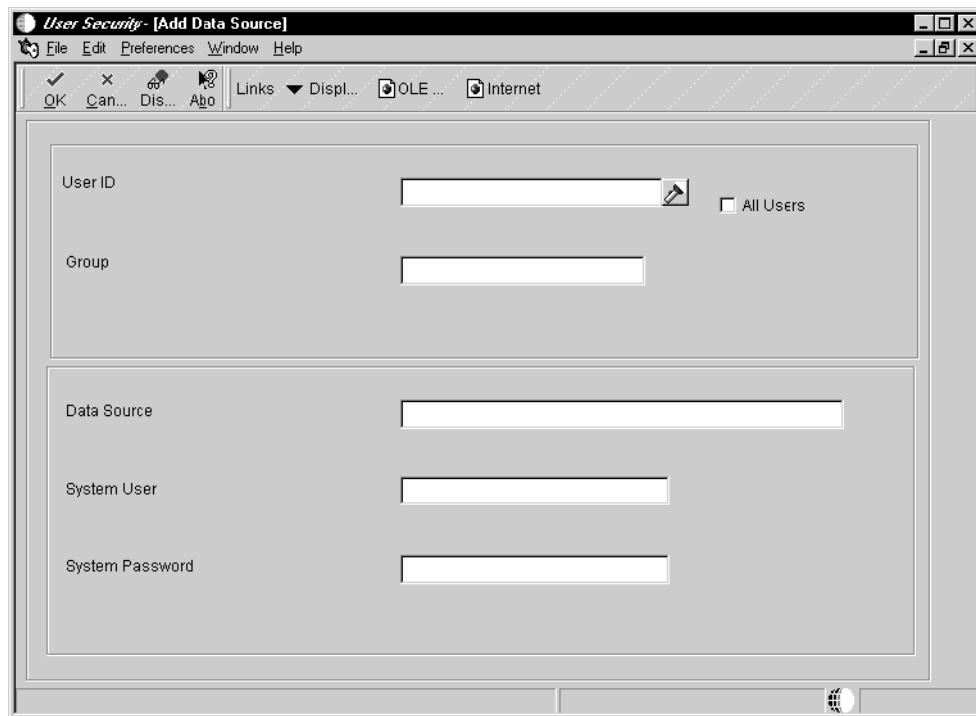
```
maxNumberOfProcesses=1
```

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 ERP 8.0 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, ERP 8.0 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 ERP 8.0. 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 ERP 8.0 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 jde.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 ERP 8.0 deployment server in the release share path:
\\Bxxx\CLIENT\MISC\jde.ini
where xxx is the installed release level of ERP 8.0. For example, 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
```

```
[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 ERP 8.0 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)
```

```
[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, ERP 8.0 assumes that you have only one server.
SecurityServer	The name of a ERP 8.0 enterprise server. Your primary and auxiliary security server names must all correspond 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.
SecurityServern	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 ERP 8.0 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
```

```
[JDENET_KERNEL_DEF4]
dispatchDLLName=name of host dll
dispatchDLLFunction=JDEK_DispatchSecurity
maxNumberOfProcesses=1
beginningMsgTypeRange=551
endingMsgTypeRange=580
newProcessThresholdRequests=0
[SECURITY]
Security Server=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 style="list-style-type: none"> • HP9000 libjdeknet.sl • RS/6000 libjdekrl.so • Windows NT (Intel) jdekml.dll • Windows NT (Compaq AlphaServer) jdekrnl.dll • AS/400 JDEKRNL For UNIX platforms, values are case-sensitive.
SecurityServer	The name of your ERP 8.0 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 ERP 8.0 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 ERP 8.0 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.
ServerPswdFile	<p>This parameter is valid for ERP 8.0 servers operating under UNIX operating systems.</p> <p>The setting of this parameter determines whether ERP 8.0 uses special password handling for batch reports running on the server. Set the value to TRUE to instruct ERP 8.0 to enable special handling of passwords. Set the value to FALSE to disable special handling.</p> <p>When ERP 8.0 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.</p> <p>As a security measure, you can enable special handling by ERP 8.0. When enabled, ERP 8.0 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.</p>
DefaultEnvironment	The name of a valid environment for accessing the security table. For example, PD7334.

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, ERP 8.0 assumes that you have only one server.
SecurityServer	The name of a ERP 8.0 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.
SecurityServerx	

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 ERP 8.0 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 ERP 8.0 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 ERP 8.0 Security table.

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
The identification code for a user profile.
- User Group
Identifies the actual user that ERP 8.0 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.
- System User ID
Identifies the number of days before ERP 8.0 requires that a user change their ERP 8.0 password. This can be set by individual user ID or by group.
- Change Frequency
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 ERP 8.0. Valid values are 01 (enabled) and 02 (disabled).

- Status

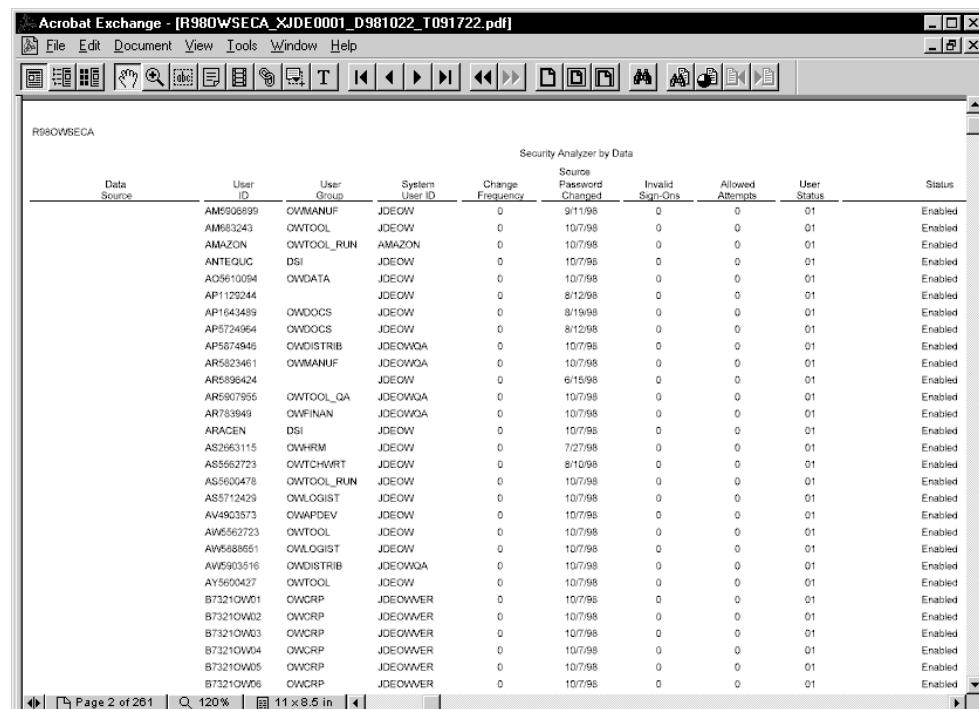
A description code that displays the status of the User Status field.

► 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).



Data Source	User ID	User Group	System User ID	Change Frequency	Source Password Changed	Invalid Sign-Ons	Allowed Attempts	User Status	Status
AM590699	OWIMANUF	JDEOW		0	9/11/98	0	0	01	Enabled
AM683243	OWTOOL	JDEOW		0	10/7/98	0	0	01	Enabled
AMAZON	OWTOOL_RUN	AMAZON		0	10/7/98	0	0	01	Enabled
ANTEQUIC	DGI	JDEOW		0	10/7/98	0	0	01	Enabled
AO5610094	OWDATA	JDEOW		0	10/7/98	0	0	01	Enabled
AP1129244		JDEOW		0	8/12/98	0	0	01	Enabled
AP1643489	OWDICS	JDEOW		0	8/19/98	0	0	01	Enabled
AP5724964	OWDICS	JDEOW		0	8/12/98	0	0	01	Enabled
AP5874946	OWDISTRIB	JDEOWQA		0	10/7/98	0	0	01	Enabled
AR5823461	OWIMANUF	JDEOWQA		0	10/7/98	0	0	01	Enabled
AR5896424		JDEOW		0	6/15/98	0	0	01	Enabled
AR5907955	OWTOOL_QA	JDEOWQA		0	10/7/98	0	0	01	Enabled
AR783949	OWFINAN	JDEOWQA		0	10/7/98	0	0	01	Enabled
ARACEN	DGI	JDEOW		0	10/7/98	0	0	01	Enabled
AS2563115	OWHRM	JDEOW		0	7/27/98	0	0	01	Enabled
AS5662723	OWTCHVRT	JDEOW		0	8/10/98	0	0	01	Enabled
AS560478	OWTOOL_RUN	JDEOW		0	10/7/98	0	0	01	Enabled
AS5712429	OWLOGIST	JDEOW		0	10/7/98	0	0	01	Enabled
AV4903573	OWAPDEV	JDEOW		0	10/7/98	0	0	01	Enabled
AV6562723	OWTOOL	JDEOW		0	10/7/98	0	0	01	Enabled
AV5888661	OWLOGIST	JDEOW		0	10/7/98	0	0	01	Enabled
AV5903916	OWDISTRIB	JDEOWQA		0	10/7/98	0	0	01	Enabled
AY560427	OWTOOL	JDEOW		0	10/7/98	0	0	01	Enabled
B7321OW01	OWCRP	JDEOWER		0	10/7/98	0	0	01	Enabled
B7321OW02	OWCRP	JDEOWER		0	10/7/98	0	0	01	Enabled
B7321OW03	OWCRP	JDEOWER		0	10/7/98	0	0	01	Enabled
B7321OW04	OWCRP	JDEOWER		0	10/7/98	0	0	01	Enabled
B7321OW05	OWCRP	JDEOWER		0	10/7/98	0	0	01	Enabled
B7321OW06	OWCRP	JDEOWER		0	10/7/98	0	0	01	Enabled

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 ERP 8.0 requires that a user change their ERP 8.0 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 ERP 8.0 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.

Acrobat Exchange - [R980WSECB_XJDE0001_D981027_T093648.pdf]

File Edit Document View Tools Window Help

R980WSECB J.D. Edwards & Company 10/27/98 9:36:50
Security Analyzer by User or Group Page - 1

User ID: AY5600427 Change Frequency: 0
Last Change Date: 10/7/98 Data Sources System UserId

JDFMINIB73	AY5600427
JDFMNB732	AY5600427
JDFMNB733 - F98811	JDEOW
JDFMNP073	AY5600427
ORACLE ALTER_TEST	MOD_TEST
ORACLE_APPL_PGF	JDEOW33
ORACLE_INDEV	JDEOW33
ORACLE_PROD	JDEOW33
SQLSERVER_DEVS4 TEST	MOD_TEST

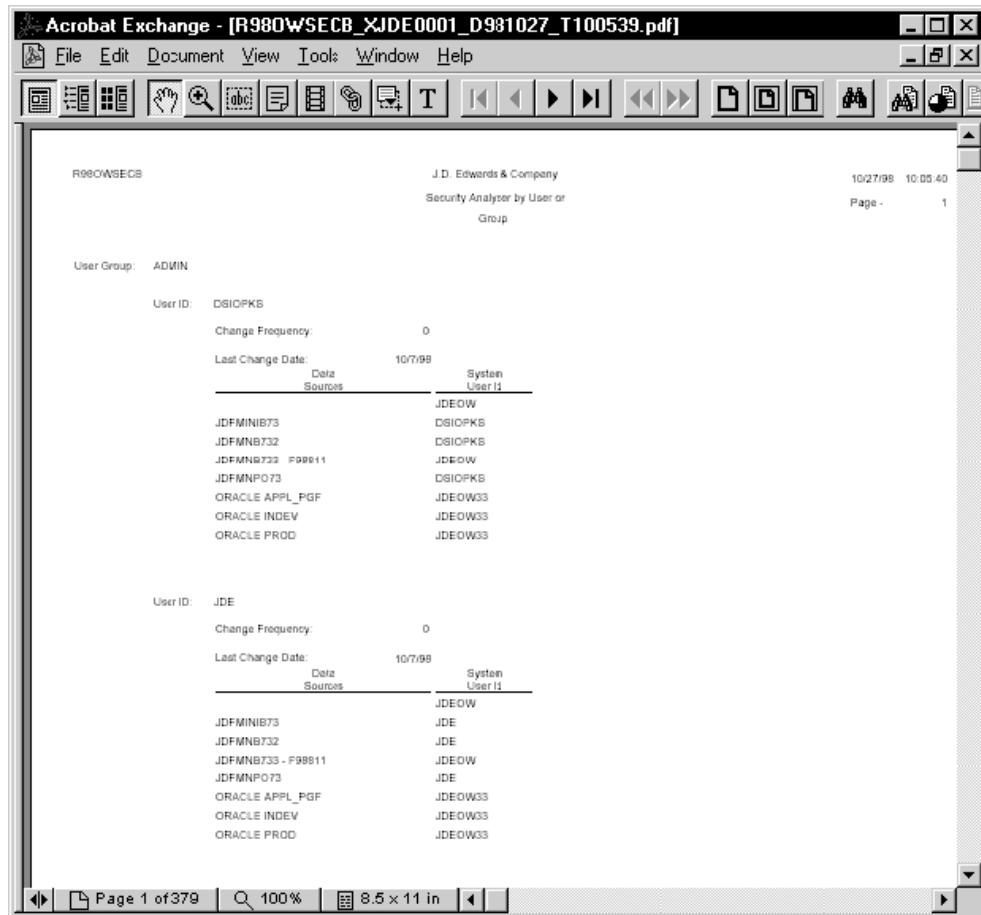
User ID: BD802417 Change Frequency: 0
Last Change Date: 10/7/98 Data Sources System UserId

JDFMINIB73	BD802417
JDFMNB732	BD802417
JDFMNB733 - F98811	JDEOW
JDFMNP073	BD802417
ORACLE_APPL_PGF	JDEOW33
ORACLE_INDEV	JDEOW33
ORACLE_PROD	JDEOW33
SQLSERVER_DEVS4 TEST	MOD_TEST

Page 1 of 391 | 100% | 8.5 x 11 in |

The screenshot shows a PDF document titled "Acrobat Exchange - [R980WSECB_XJDE0001_D981027_T093648.pdf]" displayed in a browser window. The document is a security analyzer report from J.D. Edwards & Company. It displays two sections of data, one for User ID AY5600427 and one for User ID BD802417. Each section includes fields for Change Frequency (0), Last Change Date (10/7/98), Data Sources, and System UserId. The data is presented in tables with three columns: Data Sources, System UserId, and System UserId. The report is sorted by User Group, User ID, and Data Source. The bottom of the page shows navigation controls for the PDF, including page number, zoom level, and orientation.

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 ERP 8.0 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 ERP 8.0. 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 ERP 8.0 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 ERP 8.0 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

- 0** A value of 0 for UnifiedLogon disables unified logon for the workstation. This setting is the default.
- 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 ERP 8.0, 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.

- ERP 8.0 Port Number

The port number for your unified logon server should match the ERP 8.0 port number of the ERP 8.0 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.

Portal Configuration

Through the J.D. Security Workbench application, you can determine, for anonymous and system users, groups, and *PUBLIC, who can access the J.D. Edwards 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.

See Also

- *Changing the Appearance of the ActivEra Portal* in the ERP 8.0 Foundation guide for information about changing the Portal's background images and logo

Configuring J.D. Edwards Portal Security

The J.D. Edwards Portal Security application allows you to control, for individuals or for groups, access to J.D. Edwards Portal and to the following J.D. Edwards Portal interface forms:

- Portal Personalization - The Portal Personalization form 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. A user who is an administrator in the Portal but who does not have this option enabled, will not be able to assign permissions to workspaces and components for roles or for *PUBLIC.
- 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 J.D. Edwards Portal Security application.

Security for specific workspaces and components is set individually. However, you can also give certain users administrative rights to the Portal. An individual with administrative rights is granted automatic access to all workspaces (viewable/editable) and components (viewable/selectable/editable). To grant a user administrative rights, set or create the admin parameter of the PORTALCONFIGURATION section of the JAS.ini to that user's ID. For example:

```
PORALCONFIGURATION  
admin=AB123456
```

► To configure Portal Security

From the Security Maintenance menu (GH9052), choose Security Workbench.

1. On Work with User/Group Security, from the Form menu, choose Setup Security and then choose Portal Security.
2. On Portal Security, in the User/Role field, enter the ID of the user or the role for whom you want to establish security.
3. Perform one of the following steps:
 - To deny access to the J.D. Edwards Portal, click Hide.
 - To allow access to the J.D. Edwards Portal, click View.
4. To allow access to the various J.D. Edwards Portal interface forms, click the appropriate checkboxes.
5. Click OK when finished.

Configuring the Portal Toolbars

You can create and modify buttons for the Enterprise Navigation Bar and links for the Workspace Navigation Bar. All buttons and links execute URLs when clicked. Besides specifying their functions, you can also specify the appearance of buttons on the Enterprise Navigation Bar. URLs which are not fully qualified are assumed to reside on the JAS server.

The Portal comes with 34 standard icons that can be used as Enterprise Navigation Bar buttons. These icons comprise the palette from which you choose when you create buttons. You can add new images to this palette.

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 create an Enterprise Navigation Bar button

1. Click Personalize on the Workspace Navigation Bar.

If you do not see the Personalize hyperlink, your account probably has not been configured to allow you access to this feature. Contact your system administrator for assistance.

2. Click the Enterprise Settings hyperlink.

If you do not see the Enterprise Settings hyperlink, your account probably has not been configured to allow you access to this feature. Contact your system administrator for assistance.

3. In the Enterprise Navigation Bar Icon Editor section of the form, click Add.

4. Complete the following fields:

- Icon ID

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

Click a button image or enter the URL of a different image that you want to use.

- Link URL

To link to a specific workspace, append the following to the end of the URL:
?ACTION=LOADING&NEWLAYOUT=*myworkspace* where *myworkspace* is the system name of the workspace that you want to display.

5. Click OK.

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 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.

► To configure the Enterprise Navigation Bar

This process describes how to determine the appearance and the order of buttons on the Enterprise Navigation Bar. For instructions on choosing a different URL for the toolbar's background image, see *Changing the Appearance of the Portal*.

1. Click Personalize on the Workspace Navigation Bar.
If you do not see the Personalize hyperlink, your account probably has not been configured to allow you access to this feature. Contact your system administrator for assistance.
2. Click the Enterprise Settings hyperlink.
If you do not see the Enterprise Settings hyperlink, your account probably has not been configured to allow you access to this feature. Contact your system administrator for assistance.
3. In the Enterprise Navigation Bar Icon Editor section of the form, perform any of the following tasks:
 - To reorder the available buttons, use the drop-down fields in the Sequence column.
Buttons with a dash in the Sequence column instead of a number will not appear on the toolbar.
 - To change the icon, description, or other characteristic of a button, click the associated Edit hyperlink for the button.
 - To delete the button from the system, click the associated Delete hyperlink for the button.
4. When finished, click OK.

Configuring Portal Toolbars in ERP 8.0

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 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 J.D. Edwards Portal, you can designate access of varying degrees for users, roles, or *PUBLIC.

Note

You must have the Relationships Option enabled for your account in the J.D. Edwards Portal Security application to be able assign permissions to roles and to *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. The Portal resolves permission conflicts by providing the highest level of access allowed.

See Also

- ❑ *Creating a New Workspace in the ERP 8.0 Foundation* guide for instructions on creating a Portal workspace

► To set workspace permissions

In the following task, if you do not see a particular option, your account probably has not been configured to allow you access to the feature in question. Contact your system administrator for assistance.

1. From the Portal, click Personalize on the Workspace Navigation Bar.
2. On the Workspace Navigation Bar, choose a workspace from Select Workspace.
Unless you are a system administrator, you can only choose the workspaces that you have created or to which you have been granted access.
3. In the Set Workspace Permissions section, click Permissions.
Unless you are a system administrator, this hyperlink is available only for those workspaces that you own (that you have created) or to which you have been granted the view/edit/grant permission level of access privileges.
4. In the Add User Relationship for Workspace, choose one of the following options:
 - User
If you want to define access for a user, choose the user option, and then enter the user's ID.
 - Role
If you want to define access for a role, choose the role option, and then choose a role from the associated drop-down menu.
 - PUBLIC
5. From the menu below the Public option, choose the type of access to the workspace that you want to grant.
6. Click Update.

The user, role, or *PUBLIC appears in the Edit/Remove Relationships for Workspace section of the form.

7. To delete a user, role, or *PUBLIC from the access list, click the checkbox in the Remove column next to the line to be deleted, and then click Update.
8. To add other users or roles to the access list, repeat steps 4-6.
9. When you are finished, click OK.

► **To set workspace permissions with ERP 8.0**

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 Rights

After creating a component for the J.D. Edwards Portal, you can designate different rights for users, roles, or *PUBLIC:

Note

You must have the Relationships Option enabled for your account in the J.D. Edwards Portal Security application to be able assign rights to roles and to *PUBLIC.

- View
Individuals who have View rights to your component can view it if it resides on a workspace to which the user has at least View rights.
- View>Select
Individuals who have View>Select rights to your component can not only view the component, but can choose to include it on workspaces as well.
- View>Select>Edit
Individuals who have View>Select>Edit rights to your component can not only view it and include it on workspaces, but can make changes to the component as well.
- View>Select>Edit>Grant Permissions
Individuals who have View>Select>Edit>Grant Permissions rights to your component can not only view, select, and edit the component, but can grant other individuals access rights to the component as well.

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. The Portal resolves permission conflicts by providing the highest level of access allowed.

See Also

- ActivEra Portal Design* in the *ERP 8.0 Development Tools* guide for information on creating Portal components

► To set component permissions

In the following task, if you do not see a particular option, your account probably has not been configured to allow you access to the feature in question. Contact your system administrator for assistance.

1. From the Portal, click Personalize on the Workspace Navigation Bar.
2. Click the Components hyperlink.
3. Choose a component, and then click Modify Selected.
4. In the Set Component Permissions section, click Permissions.
Unless you are a system administrator, this hyperlink is available only for those components that you have created or to which you have been granted view/select/edit/grant permission rights.
5. In the Add User Relationship for Component section, choose the User, Role, or Public option.
 - a. To define rights for a user, choose the user option, and then enter the user's ID.
 - b. To define rights for a role, choose the role option, and then select a role from the associated menu. If you do not see this feature, your account probably has not been configured to allow you access to this feature. Contact your system administrator for assistance.
6. From the menu directly beneath the Public option, choose the type of rights to the component that you want to grant.
7. Click Update.

The user, role, or *PUBLIC appears in the Edit/Remove Relationships for Component section of the form.

8. To change rights for a user, role, or *PUBLIC, choose a different option from the Permissions drop-down menu, and then click Update.
9. To delete a user, role, or *PUBLIC from the access list, click the checkbox in the Remove column next to the line to be deleted, and then click Update.
10. Repeat steps 5-7 to add other users or roles to the access list.
11. When you are finished, click OK.

► To set component permissions with ERP 8.0

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

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

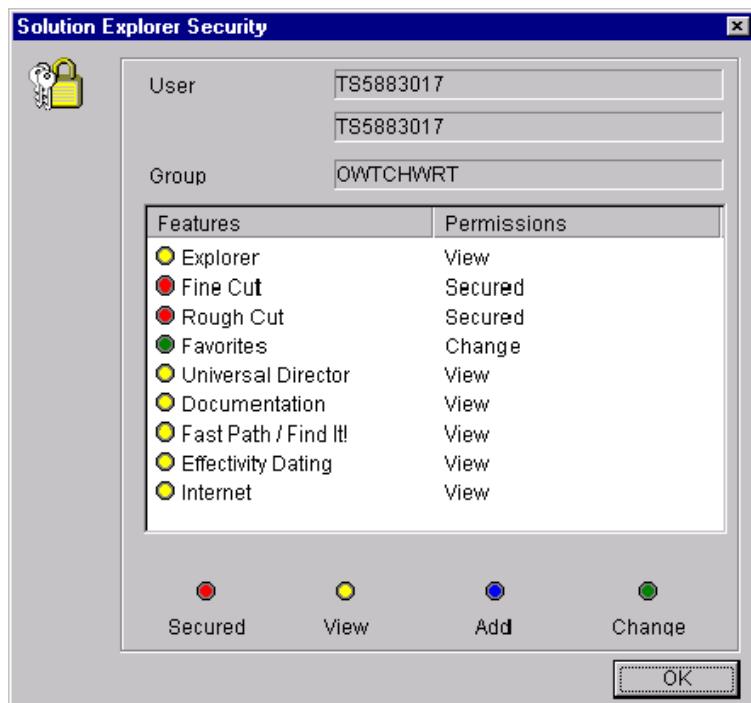
Viewing security settings in Solution Explorer allows you to check the permissions for each feature for any user in the system. You view the settings by logging into the Solution Explorer as the particular user whose settings you want to view, and then click the security button in

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 Solution Explorer, double-click the Security button (the lock icon) in the status bar.

The Solution Explorer 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.

► 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 ERP 8.0 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

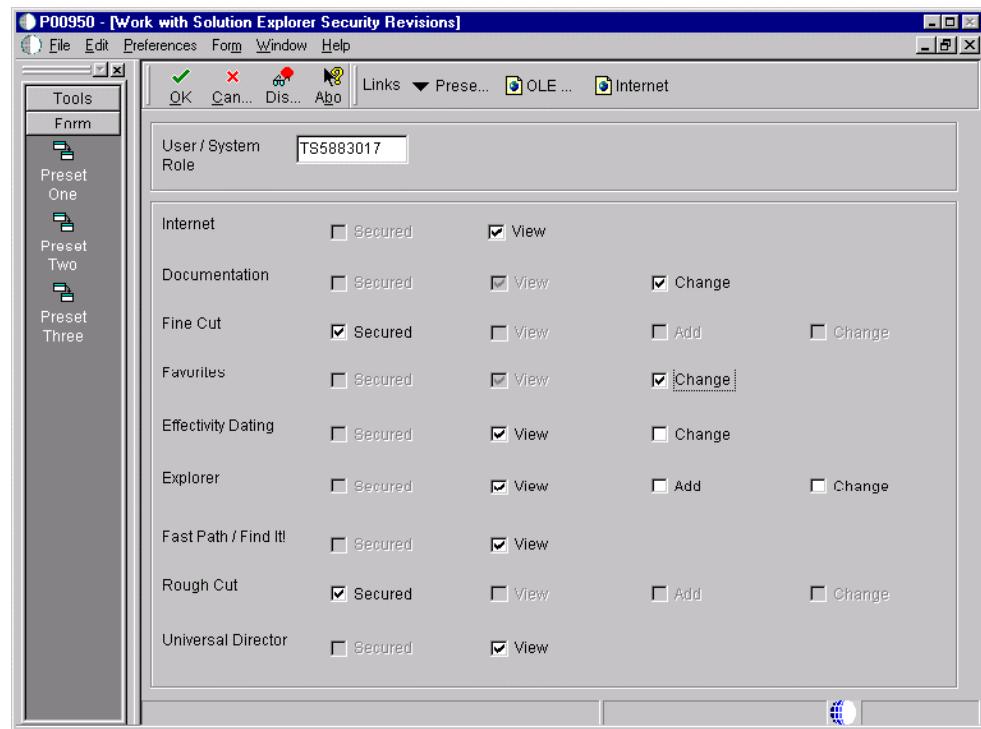
The Work With Solution Explorer Security Revisions form contains Preset buttons on the exit bar that represent default security settings for different types of users in your system. These user types correspond to novice (Preset 1), intermediate (Preset 2), and expert users (Preset 3). If you click one 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

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 ERP 8.0 software update.

Because the Vocabulary Overrides application (P9220) affects the user interface throughout ERP 8.0, 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 *ERP 8.0 Development Tools* guide for information about using Object Management Workbench and checking applications in and out.

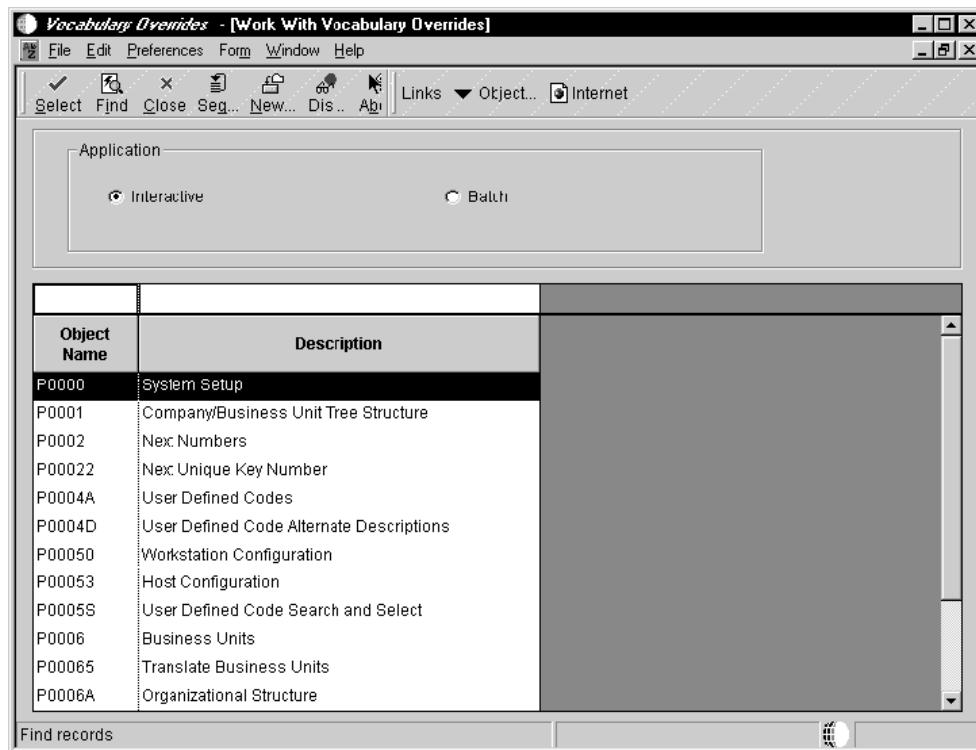
After you make vocabulary override changes, use an update package to push these changes to your users. See the *Package Management Guide* for information about building packages. You do *not* need to rebuild the application before building it into a package if the only change to the application is due to vocabulary overrides.

Accessing Vocabulary Overrides

You can access the Vocabulary Overrides application from either a ERP 8.0 Explorer menu (System Administration Tools) or from within 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.

► 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 ERP 8.0 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.

► 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
2. Enter a language code. Leave this field blank if you are creating vocabulary overrides in your domestic language.
3. 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.
4. 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.
5. 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.

However, to actually see the description change applied to the application, you must first checkout the application to the local client machine and run it. This can be done by clicking either the Check Out or Get button in the Object Management Workbench.

See Also

- ❑ *Object Management Workbench* and *Checkout Log* in the *Development Tools Guide* for more information about how ERP 8.0 checks objects in and out.
- ❑ *Package Management Guide* for information about deploying changed 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.

Reviewing Vocabulary Overrides

You can use Vocabulary Overrides to review every location in ERP 8.0 where someone has overridden 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 fields, then click OK.
 - Data Item
Enter a Data Item to search for.
Select a scope for the Application search by completing one of the following:
 - Interactive Application
 - Batch
 - Both
- Output results by choosing one of the following

- Interactive
- 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, ERP 8.0 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).

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.

ERP 8.0 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. ERP 8.0 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.

ERP 8.0 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, ERP 8.0 resets the data item to the default data dictionary definition.

Caution:

When you choose the Reset by Version menu option, the decision is final. ERP 8.0 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.

ERP 8.0 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, ERP 8.0 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. ERP 8.0 does not provide a confirmation box or a proof mode.

The Scheduler Application

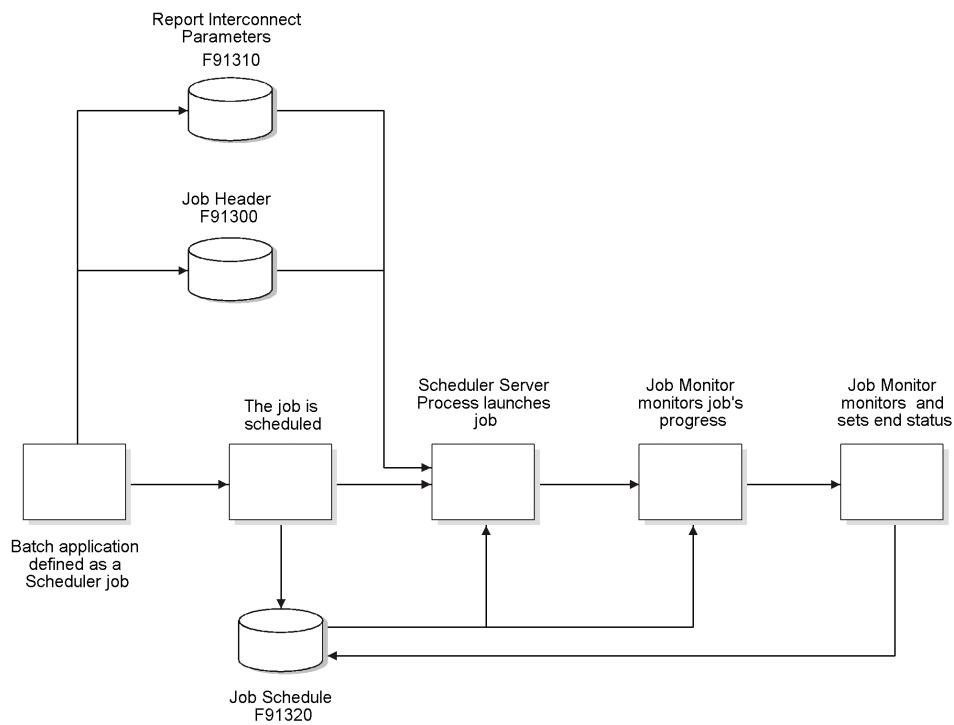
The Scheduler Application

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.

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.

Before You Begin

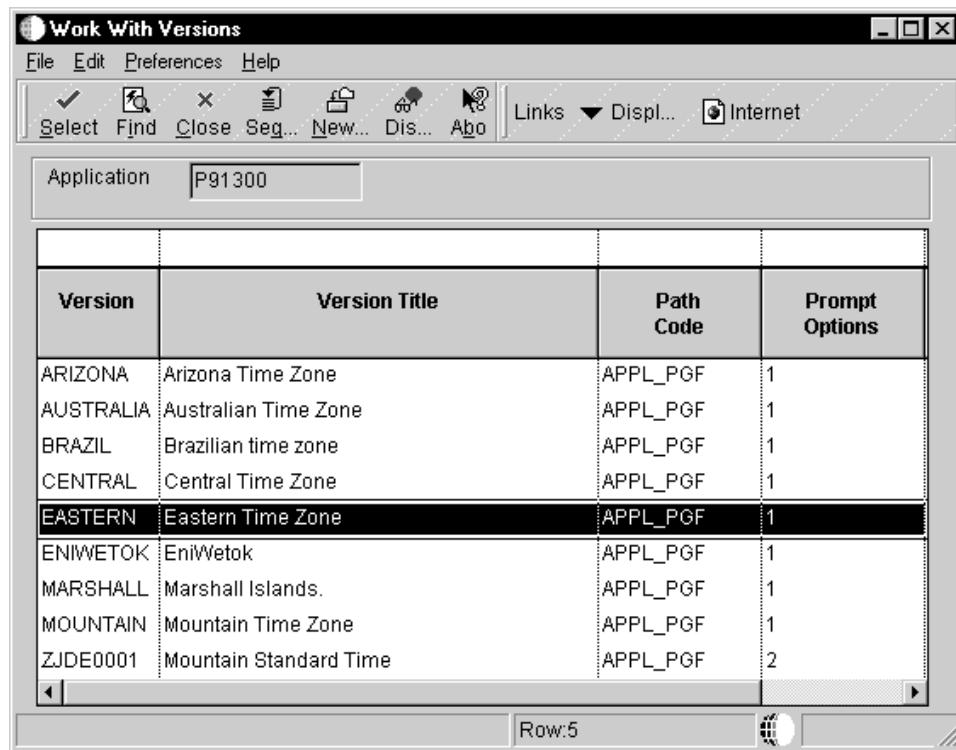
- To use a server's time zone, you must first specify the time zones that you want to use. To do this, copy the Scheduler processing options (version ZJDE0001 on the Work with Versions form) and modify them according to your needs. If you use more than one time zone, you should modify the processing 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.



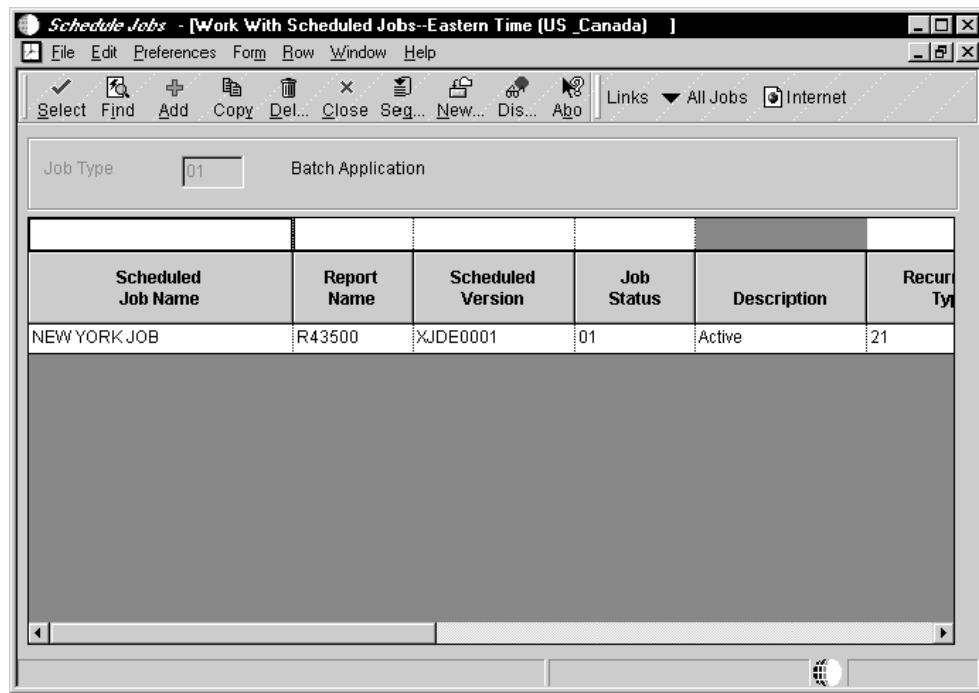
Note:

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.

The screenshot shows a Windows application window titled "Schedule Jobs - [Scheduling Information Add-Eastern Time (US _Canada)]". The menu bar includes File, Edit, Preferences, Form, Window, Help, and a toolbar with OK, Cancel, Dis..., and Abo. Below the toolbar is a status bar with Links, Recur..., and Internet. The main area displays a form with the following fields:

Scheduled Job Name	BATCH UPLOAD	
Scheduled Job Status	01 Active	
Scheduled Batch Application	R03010Z	Customer Master Batch Upload
Scheduled Version	ZJDE0001	Customer Master Batch Upload M
Scheduled Start Date/Time	9/22/98	12:00:00

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.

See Also

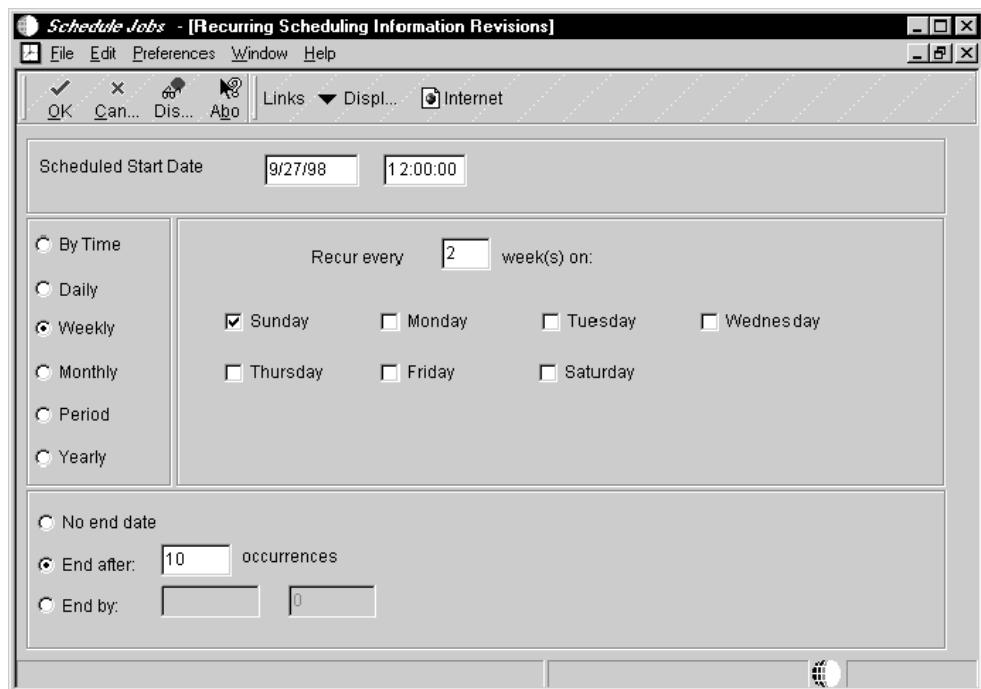
- *Scheduling a Recurring Job*
- *Working with Job Properties*
- *Entering Scheduler Processing Options*

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* days OR

Every weekday

Run the job at the specified time interval. (For example, run the job every 40 minutes or every 8 hours.)

- Daily

- Daily

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 *nth* 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

- 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:

Where x is the number of occurrences of that job that can run before it expires.

- End by:

Enter the month, day, and year on which you want the job to expire.

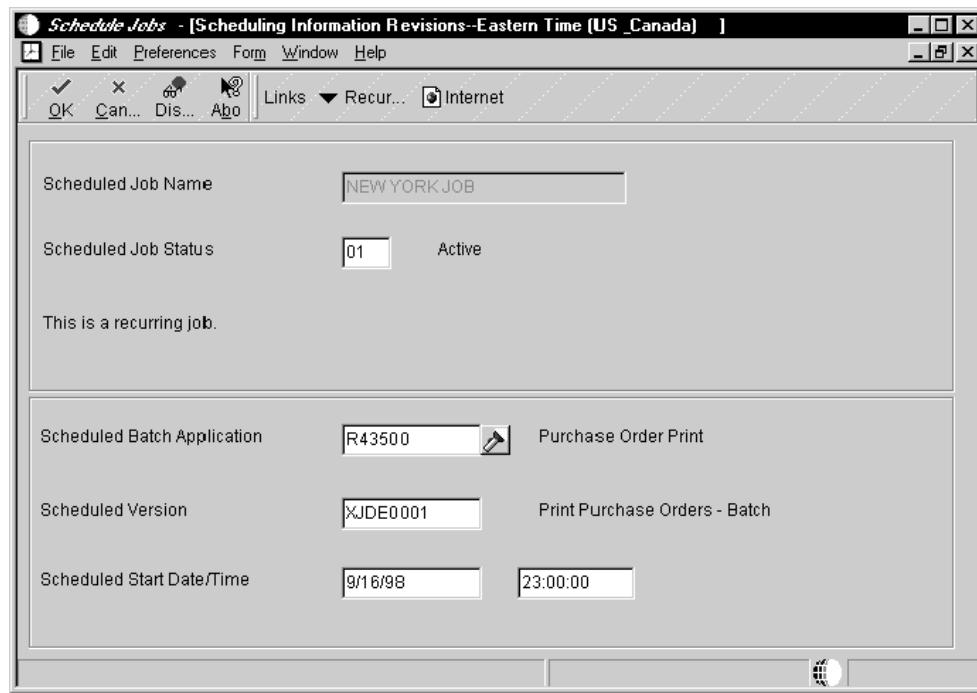
4. Click OK.

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.

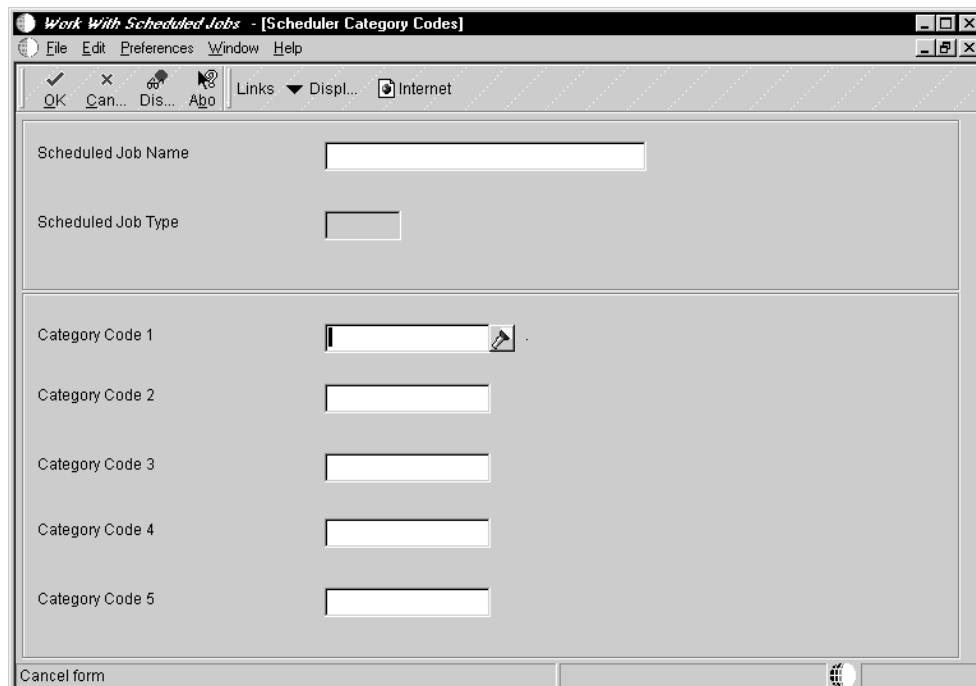
Work With Scheduled Jobs - [Scheduler Category Codes]

File Edit Preferences Window Help

OK Cancel Define Display Internet

Scheduled Job Name	<input type="text"/>
Scheduled Job Type	<input type="text"/>
Category Code 1	<input type="text"/> 
Category Code 2	<input type="text"/>
Category Code 3	<input type="text"/>
Category Code 4	<input type="text"/>
Category Code 5	<input type="text"/>

Cancel form 



7. If you want to revise this job's advanced functions, choose Advanced Functions from the Form menu.

The Scheduling Advanced Functions form appears.

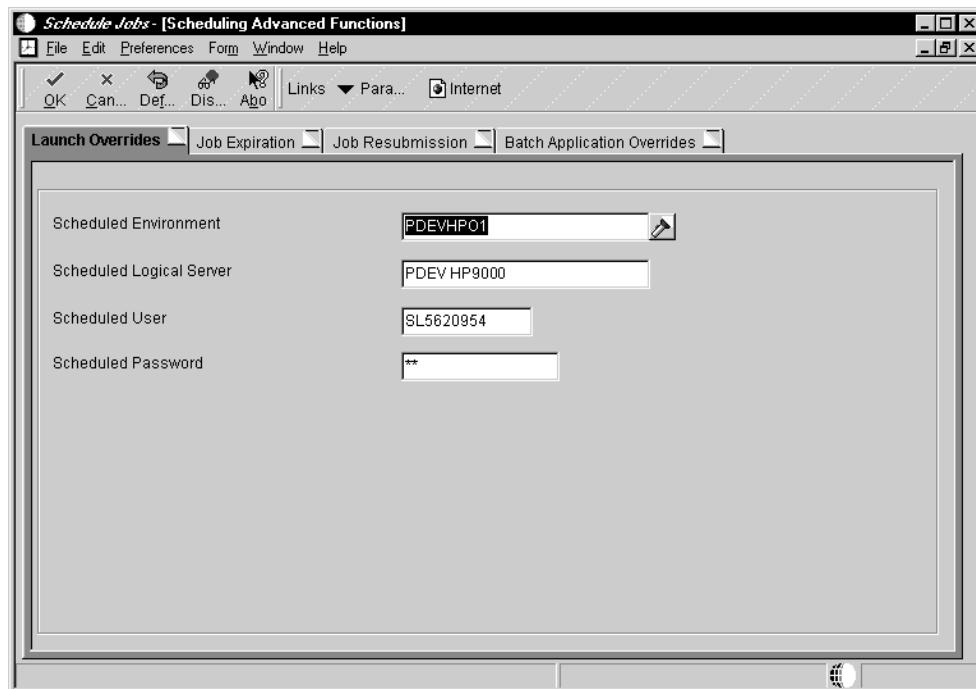
Schedule Jobs - [Scheduling Advanced Functions]

File Edit Preferences Form Window Help

OK Cancel Define Display Para... Internet

Launch Overrides Job Expiration Job Resubmission Batch Application Overrides

Scheduled Environment	<input type="text"/> PDEVHPO1 
Scheduled Logical Server	<input type="text"/> PDEV HP9000
Scheduled User	<input type="text"/> SL5620954
Scheduled Password	<input type="text"/> **



For more information about entering advanced functions, see [Working With Job Properties](#).

Note:

You can also activate or deactivate 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.
-

Display

1. Enter '2' to view the time based on the local time zone stated below. Enter '1' to view the time in Universal Coordinated Time (UTC).

View Local Time

2. If viewing local time, what time zone and daylight savings setting do you want?

Local Time Zone

Enter '1' to adjust time for daylight savings. Enter '0' to never adjust for daylight savings.

Use this Daylight Savings Rule when adjusting for daylight savings.

Process

1. Please enter the maximum number of schedule records for a recurring job with no end date.

Maximum number of job schedule records

Defaults

1. Enter the default job type to be scheduled.

Default Job Type

2. Enter the number of default occurrences to be displayed on the Recurrence Schedule Information Revisions form.

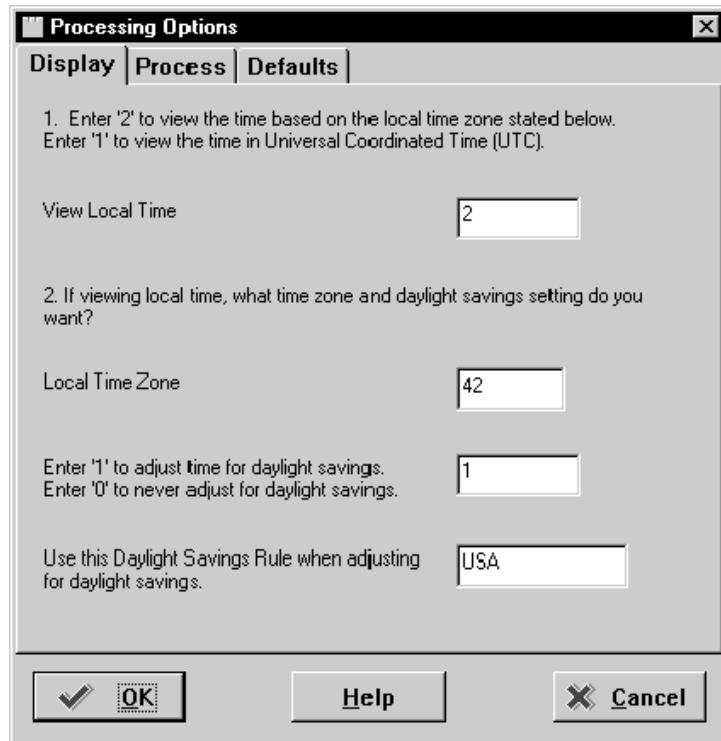
Number Of Job Occurrences

3. Enter the default maximum number of times that a job schedule can be resubmitted if it has indicated a resubmission policy.

Max Number of Job re-submissions

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.



The remaining fields apply only if you specified local time.

Local Time Zone

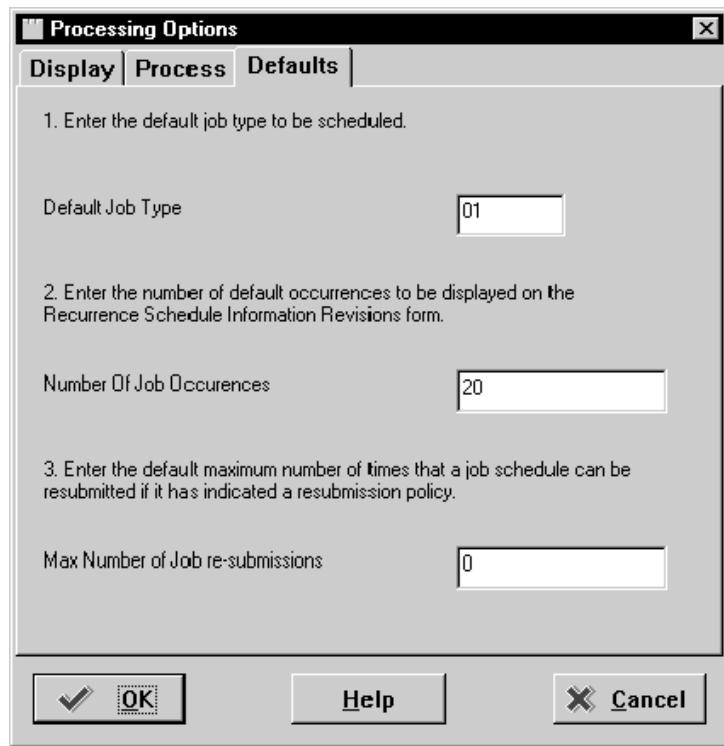
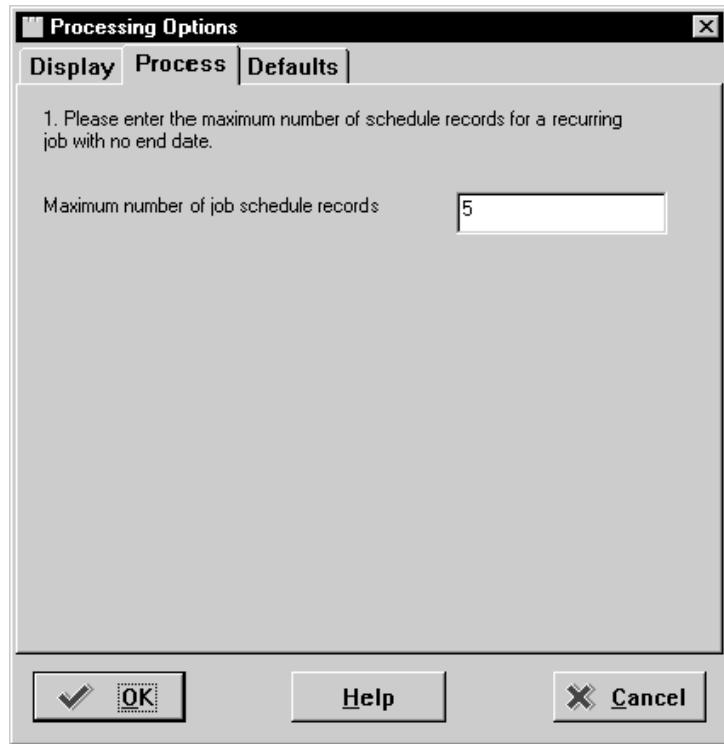
In the Local Time Zone field, use the visual assist to locate the local time zone for the server for which you want to schedule a jog in your area.

Enter '1' to adjust time for daylight savings. Enter '0' to never adjust for daylight savings.

Enter 1 to have ERP 8.0 automatically adjust the time when daylight savings time goes into effect. If you do not want ERP 8.0 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*.



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.

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.

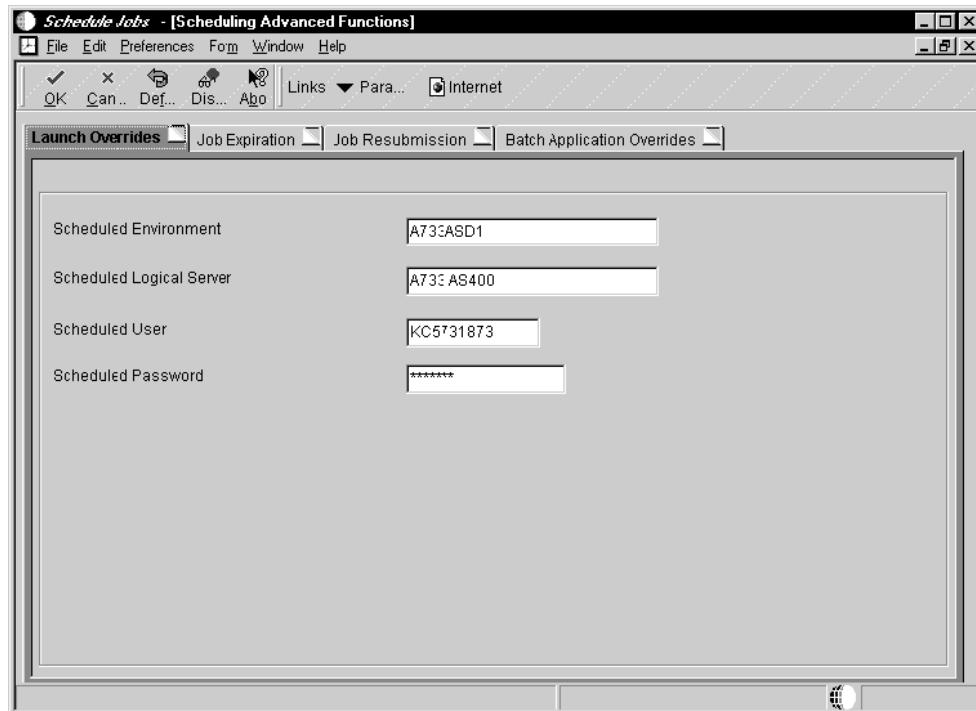
Overriding the Environment

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.

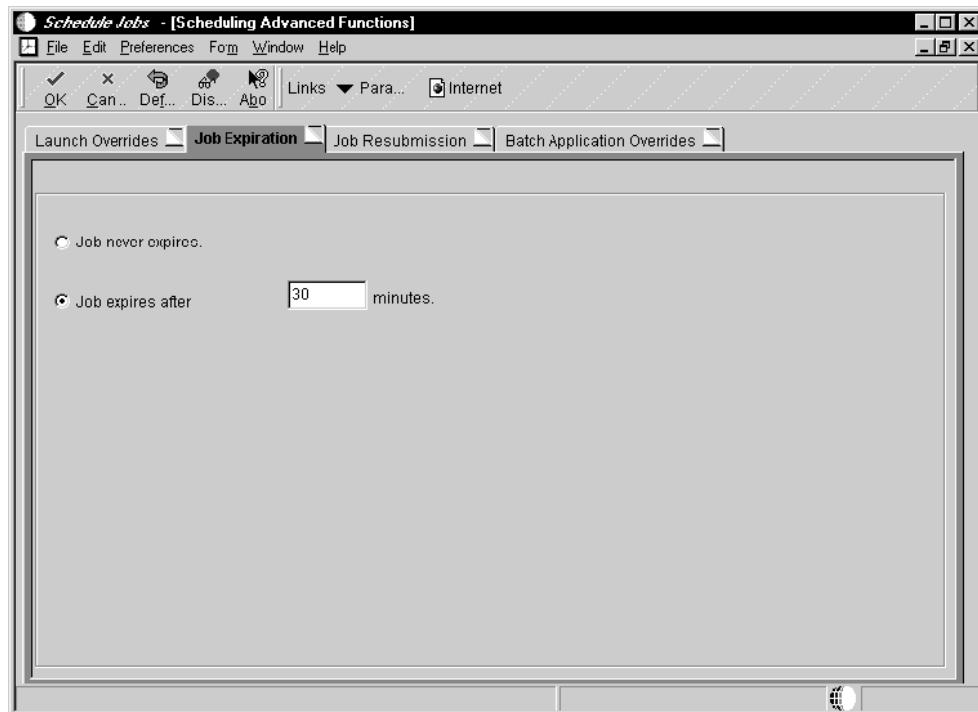
Overriding Job Expiration Specifications

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.

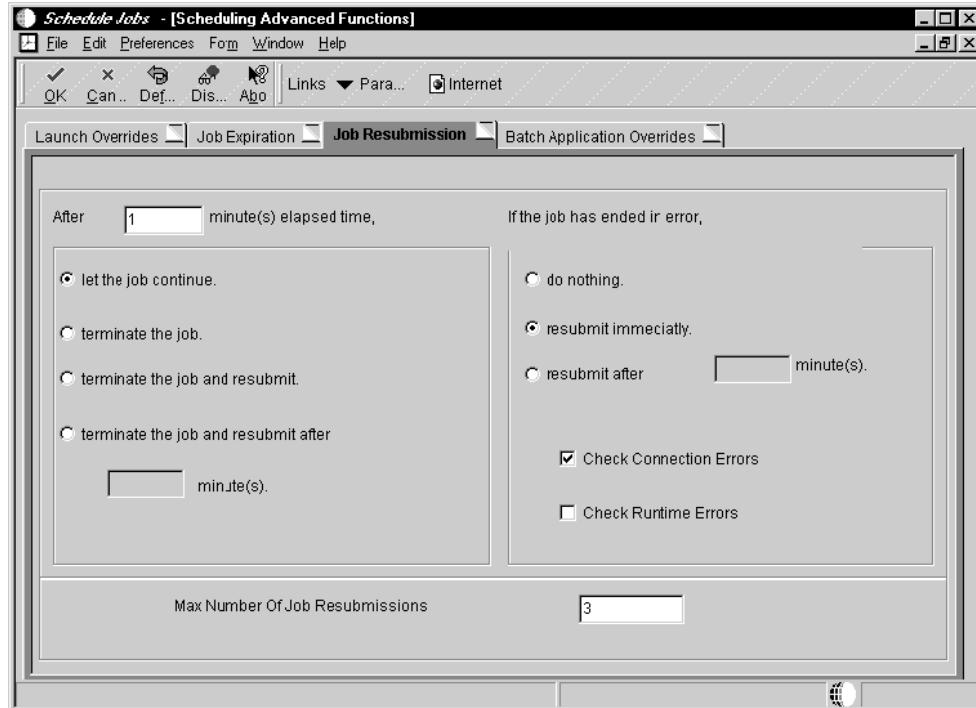
Defining When the Scheduler Resubmits a Job

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
5. Choose one of the following options that apply when the job ends in error:
 - do nothing.
 - resubmit immediately.
 - resubmit after

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.

Overriding Batch Application Specifications

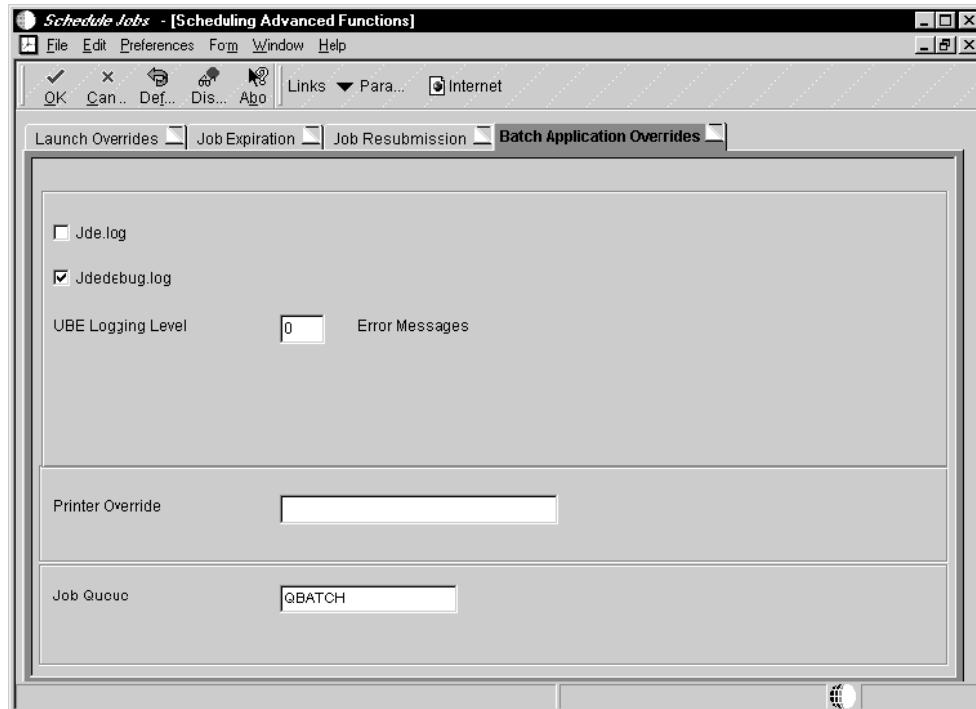
You can specify if you want errors written to the jde.log. If you want errors written to the jddebug.log, you can set the trace level to determine what types of errors to include in the log.

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
- jddebug.log

If you chose jddebug.log, you must also choose the jde.log option.

4. Complete the following fields:

- UBE Logging Level

If you chose jddebug.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.

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.

Reviewing All Job Schedules

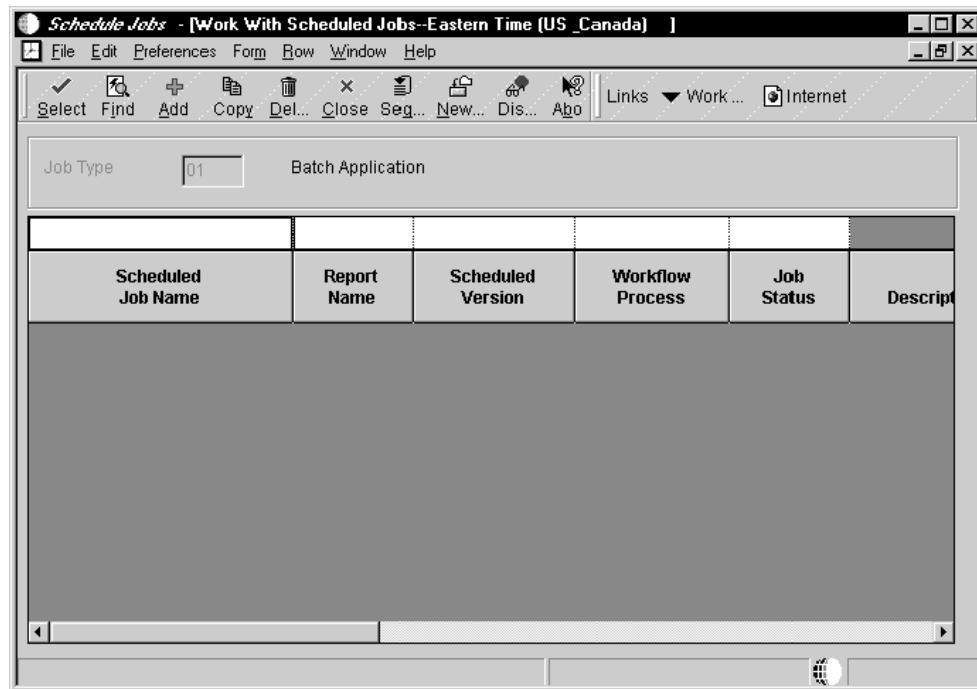
When you review all job schedules, you can view all instances of jobs that have been launched. You can even revise a job by choosing a job instance, and then choosing Revise Job from the Row menu.

See [Revising a Scheduled Job](#) for more information about revising the job schedule.

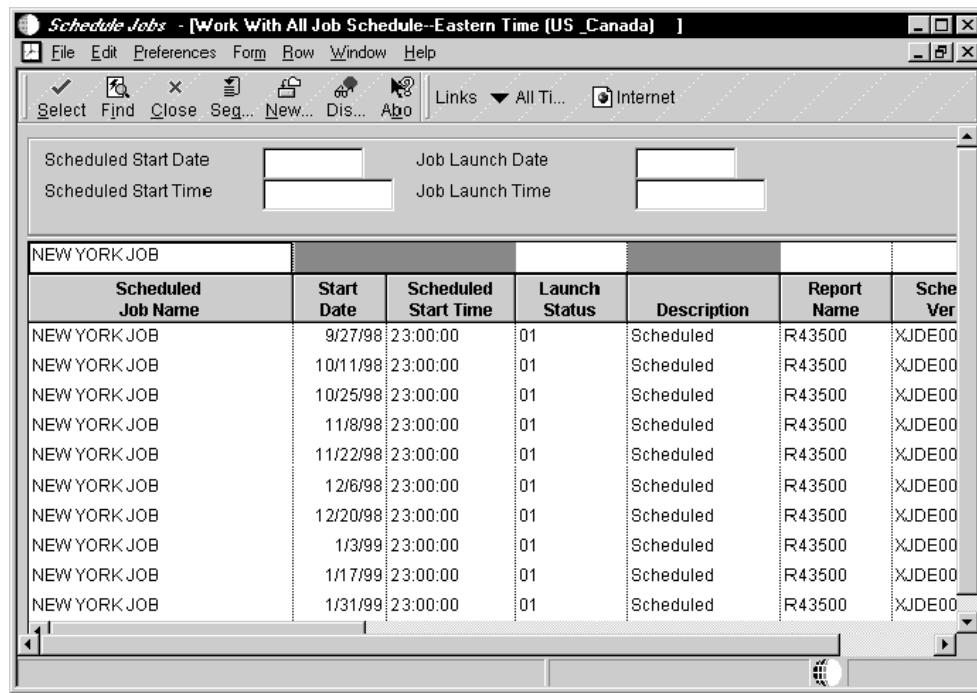
You can filter the job instances that you want to review by launch date, start date, and time. For example, you can review all job instances for today's date by entering that date in the Scheduled Start Date field. Or, you can review all job instances that were launched on a certain date by entering 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, filter by start date or start time by completing the following fields:
 - Scheduled Start Date
 - Scheduled Start Time
4. To filter by launch date or launch time, complete the following fields:
 - Job Launch Date
 - Job Launch Time
5. 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.

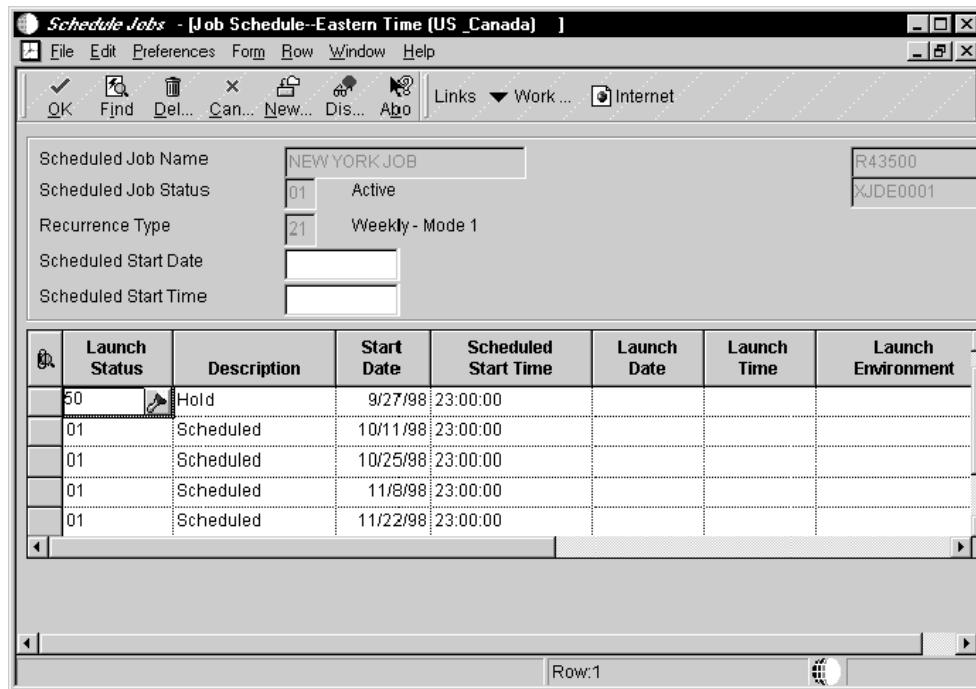
Alternatively, choose Local Time Zone from the Form menu to view all scheduled jobs in the local time zone.

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.



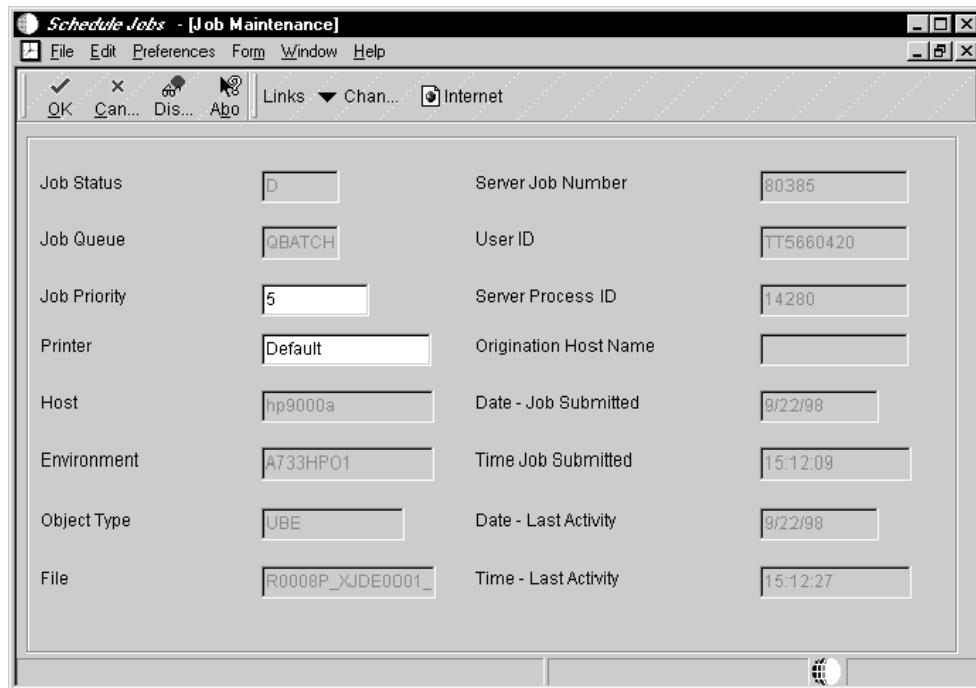
5. On Job Schedule, choose the job instance whose launch status you want to change, and then enter a new status in the Launch Status field.
Enter 1 for Scheduled or 50 for Hold.
6. Click OK.

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 and click OK:

- Job Priority
- Printer Name

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:

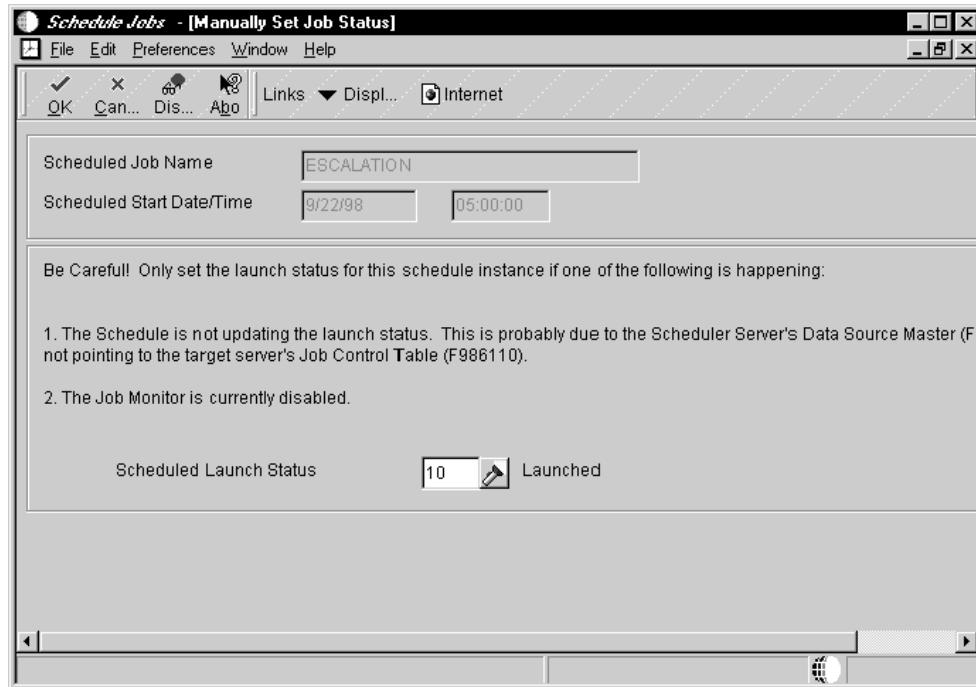
If you need to kill a job, choose Work with Servers from the Form menu on the Work with Scheduled Jobs form.

Caution:

You should secure other users from accessing the Set Status option. Only the ERP 8.0 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.



- 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).

See Also

- *Creating a Report Interconnection* in the *ERP 8.0 Development Tools Guide*.
- *Debug Tracing* in the *ERP 8.0 Development Tools Guide* for information about setting trace levels.

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.

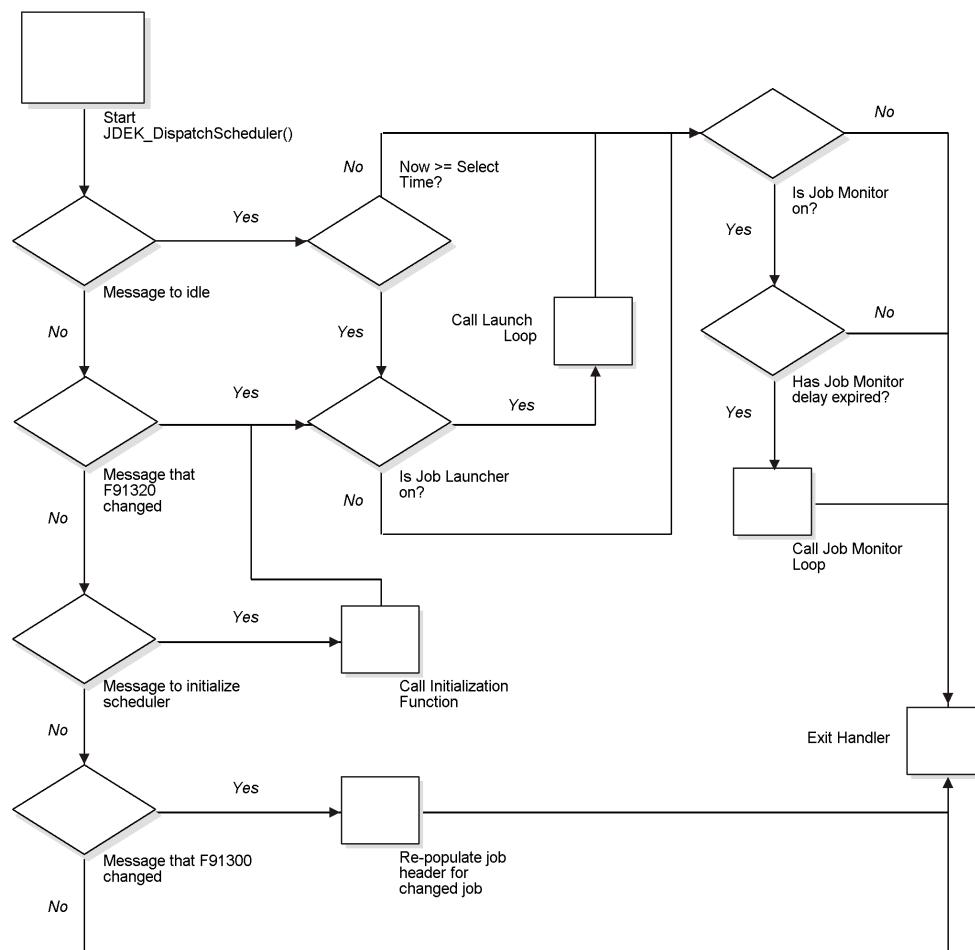
For example, when the launch loop starts on the server it will set a flag in this record to indicate that it is up and running. You can end the launch loop by toggling the corresponding end process flag (such as Job Launcher Status or Job Monitor status) from the Form menu on Scheduler Server Control. 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.

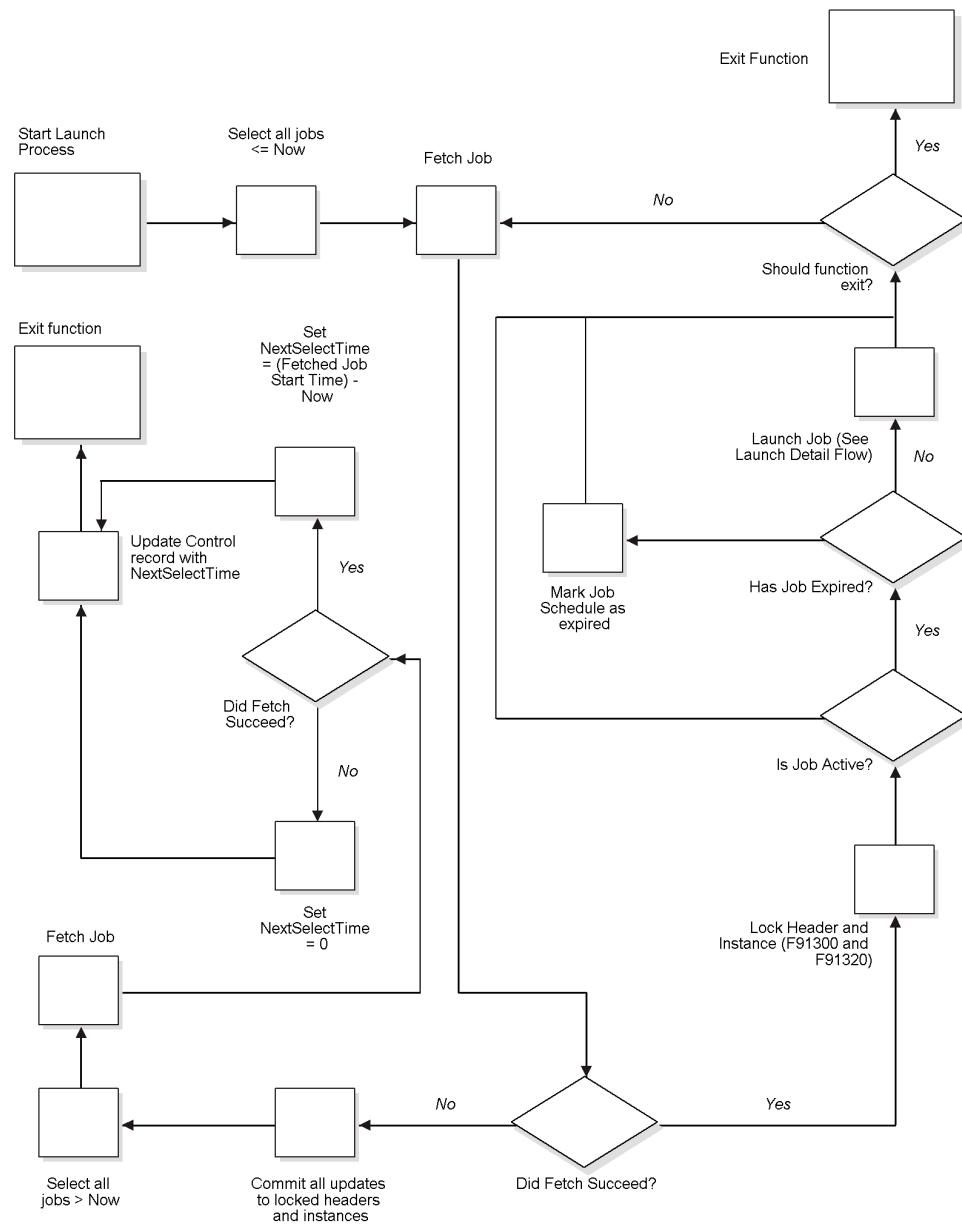


Launch Loop

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.

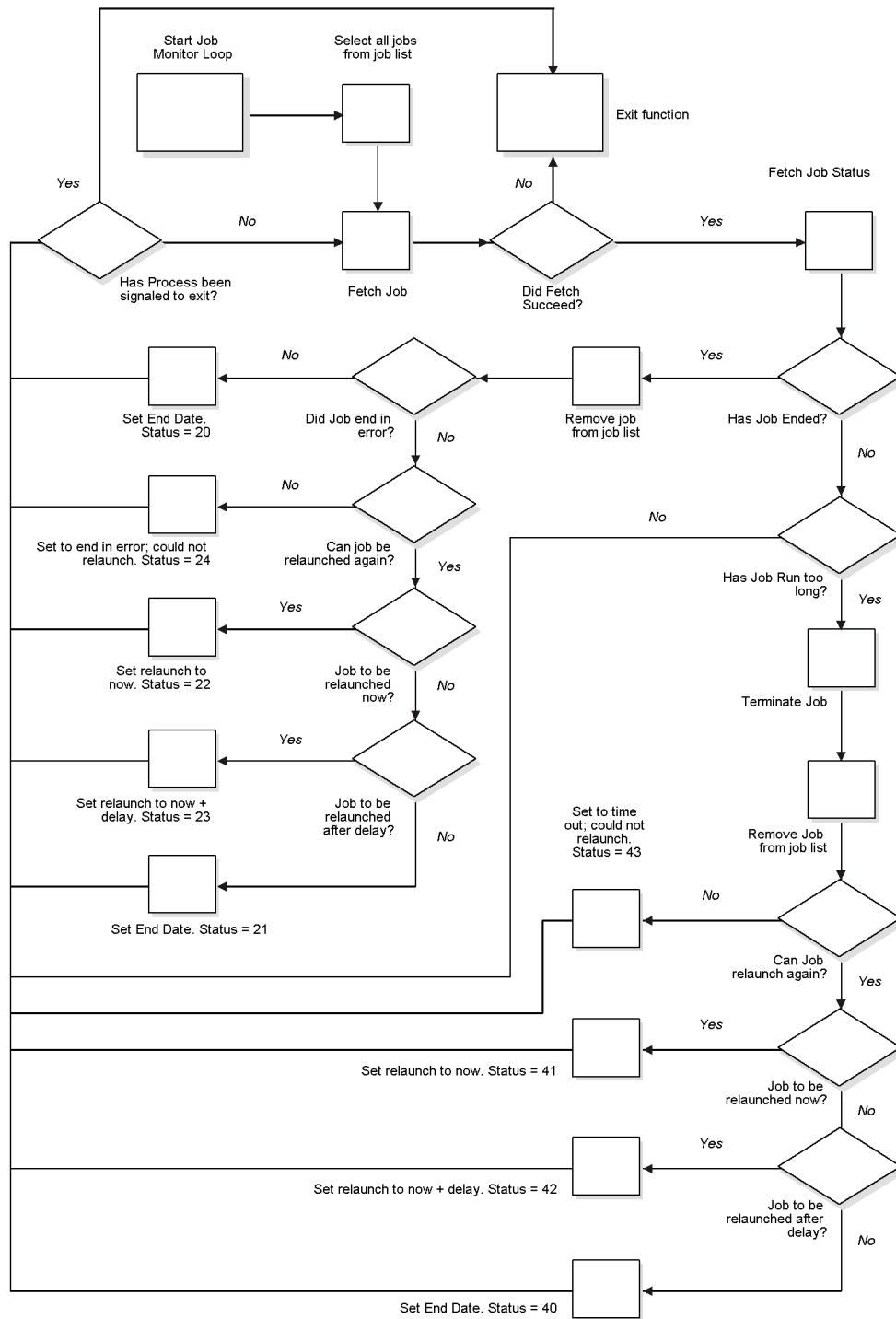
The following illustration shows the launch loop process flow:



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.



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 [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.

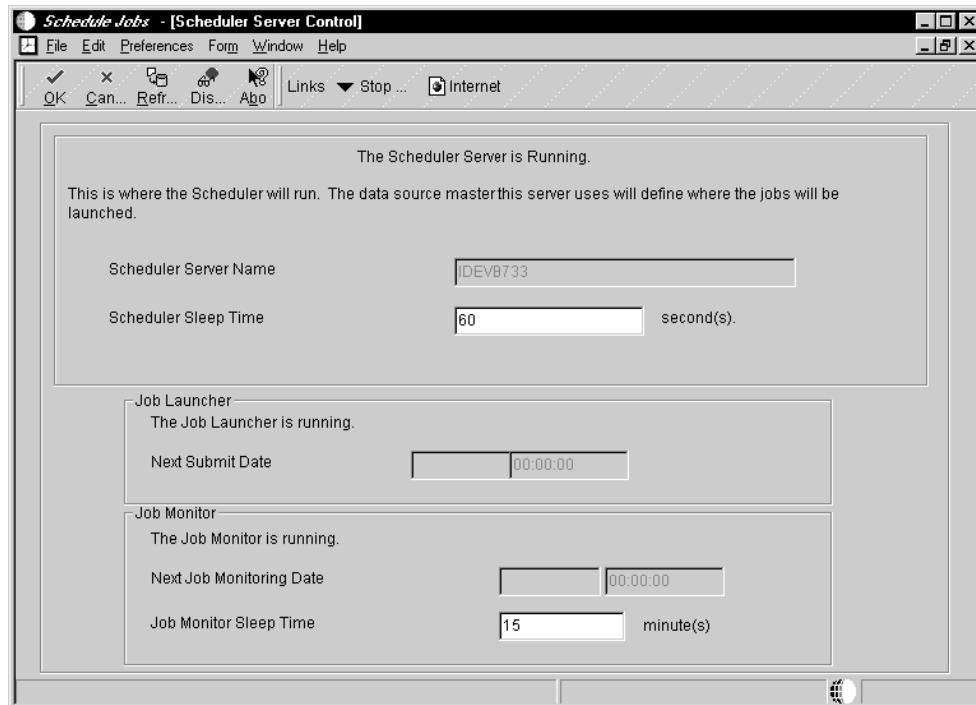
NOTE:

This application is for ERP 8.0 administrators only. You should secure users from accessing the Scheduler Server application.

For more information about security, see the [Security](#) section.

► 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.
3. 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.

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.

► To add a new daylight savings rule

1. From the Job Scheduler menu (GH9015), choose Daylight Savings Rules (P00085).

Daylight Savings Rules - [Work With Daylight Savings Rules]

This screenshot shows a software application window titled "Daylight Savings Rules - [Work With Daylight Savings Rules]". The menu bar includes File, Edit, Preferences, Window, Help, Links, Display, and Internet. Below the menu is a toolbar with icons for Select, Find, Add, Copy, Del..., Close, Seg..., New..., Dis..., Abo, and a magnifying glass. A large table lists three rules:

Rule Name	Description	Rule Type	Description
AUSTRALIA	Australian Daylight Savings	01	By Day of Week Instance
BRAZIL	Brazil Dis Rules	02	By Day and Month
USA	U.S. Daylight Savings	01	By Day of Week Instance

2. On Work with Daylight Savings Rules, click Add.

Daylight Savings Rules - [Add Daylight Savings Rule]

This screenshot shows a dialog box titled "Add Daylight Savings Rule". The menu bar includes File, Edit, Preferences, Window, Help, OK, Cancel, Display, and Abort. The toolbar includes icons for OK, Cancel, Display, and Abort. The form contains fields for Rule Name (with a browse button), Description, and Rule Type (radio buttons for "By Day of Week Instance" (selected) and "By Day of the month"). Below the form are sections for "Daylight Savings starts on" and "Daylight Savings ends on", each with fields for date and time selection.

3. On Add Daylight Savings Rule, complete the following fields:

- Rule Name
- Description

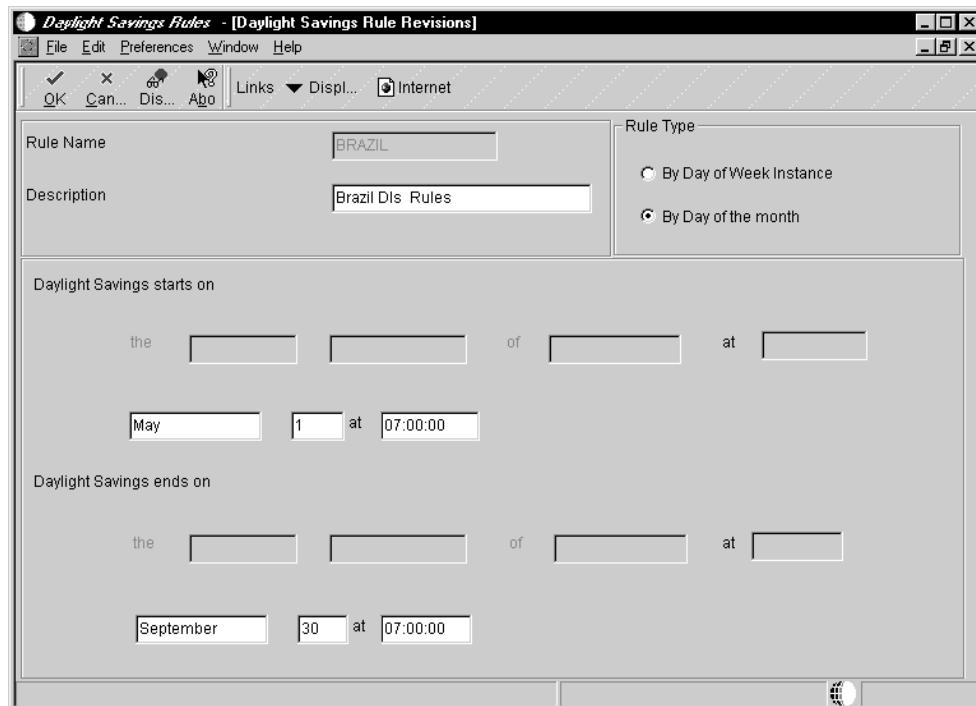
4. Choose one of the following rule types:

- 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.

► 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

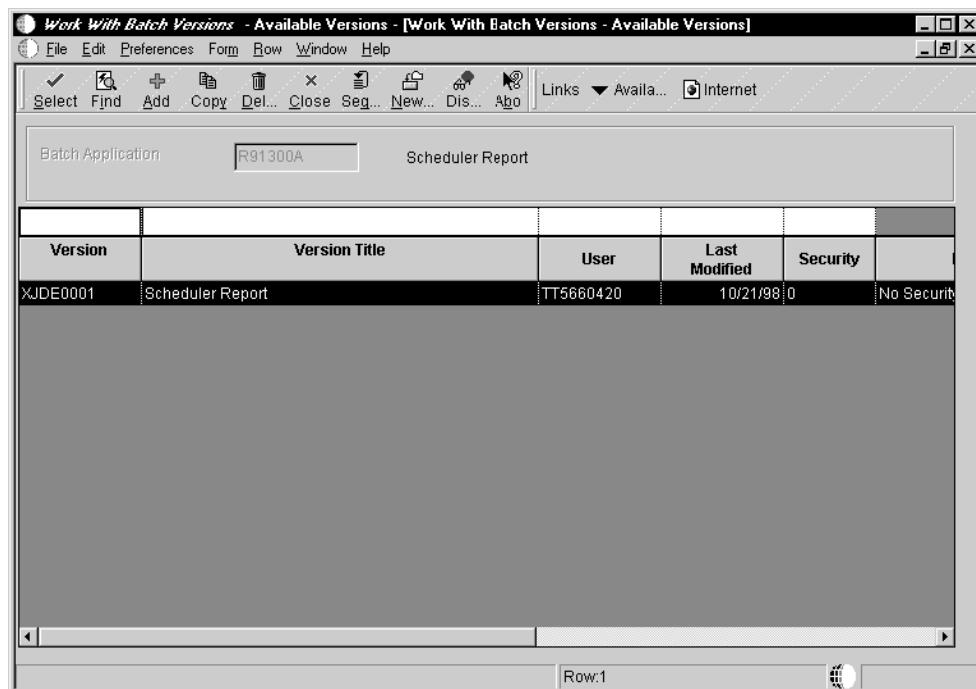
Run the Scheduled Jobs report when you want to review a summary of scheduled jobs and their status. You can use processing options to specify whether to run this report based on Universal Coordinated Time or local time. You can also adjust for daylight savings time.

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.

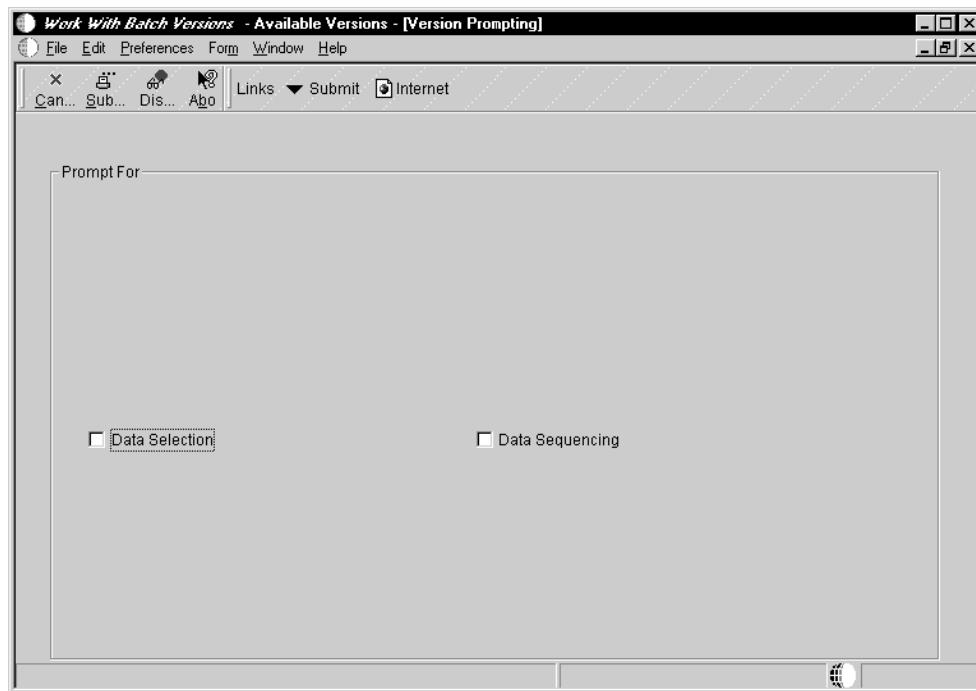
The following task describes how to run these reports. The procedure is the same regardless of which report you run.

► 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

Media Objects and Imaging

ERP 8.0'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 ERP 8.0 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. ERP 8.0 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 ERP 8.0.
JDE Shortcuts	A JDE shortcut is a link that opens a ERP 8.0 application. Within media objects, you can only attach ERP 8.0 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 the *ERP 8.0 Development Tools Guide* for information on creating attachment templates.

What Is Imaging?

The imaging capabilities available in ERP 8.0 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. ERP 8.0 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. ERP 8.0's implementation of imaging also provides a view of integrated images using the viewer of the native imaging product.

Enabling ERP 8.0 to Use Media Objects

To use media objects, ERP 8.0 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 ERP 8.0 objects (rows, forms, and reports)
- Indicating which ERP 8.0 objects have attachments
- Creating or viewing attachments

ERP 8.0 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.

ERP 8.0 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 ERP 8.0, 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.

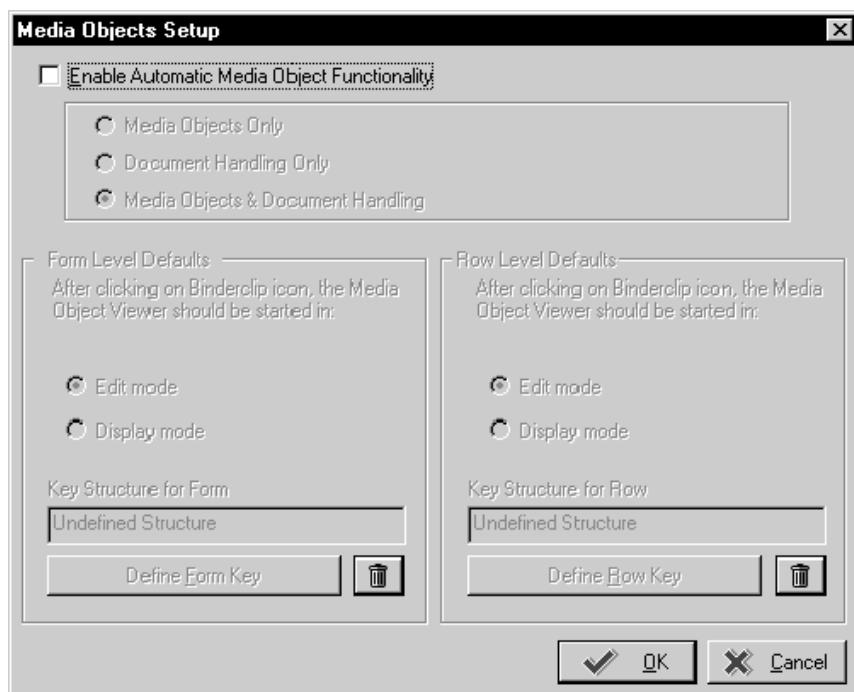
Before You Begin

- To see the media object paper clip column on a form, turn off the Hide Row Headers option on the Grid properties for the form.

► To enable ERP 8.0 to use media objects

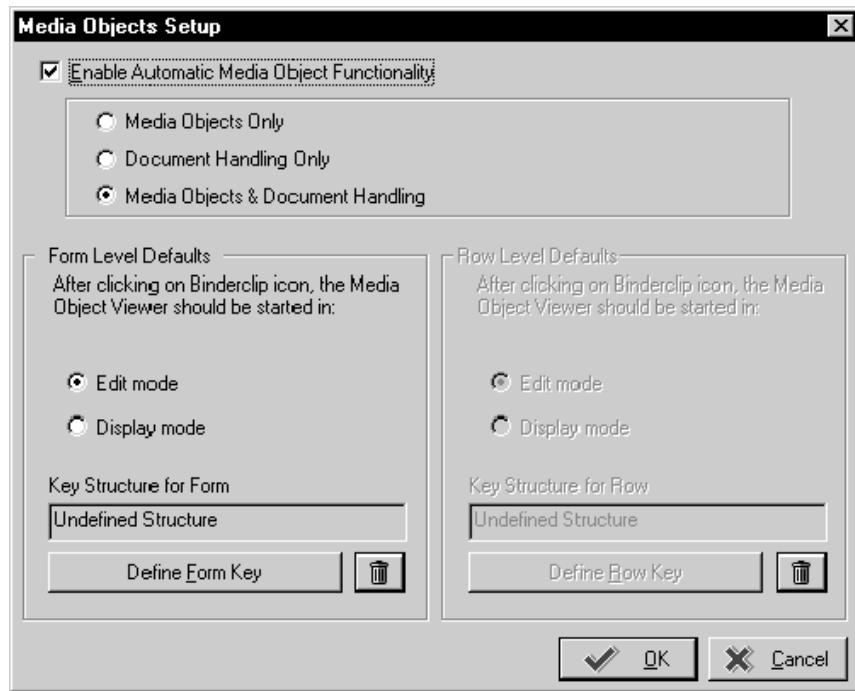
Use this procedure to create new forms to enable processing for media objects, or to change an existing form that is not currently enabled.

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.



- Click the Enable Automatic Media Object Functionality option.

This enables imaging and activates the other fields on the form.



- 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 ERP 8.0.

- 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

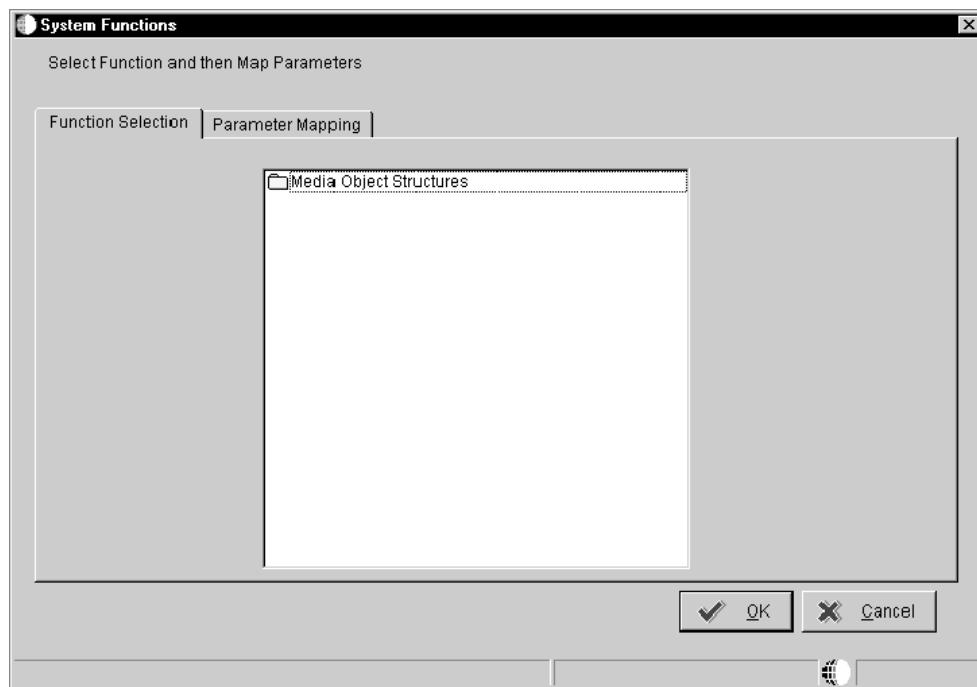
If you want to enable standard processing later, you must delete all of the event rules for media objects and choose the Media Objects & Document Handling option.

- Click Edit mode or Display mode.

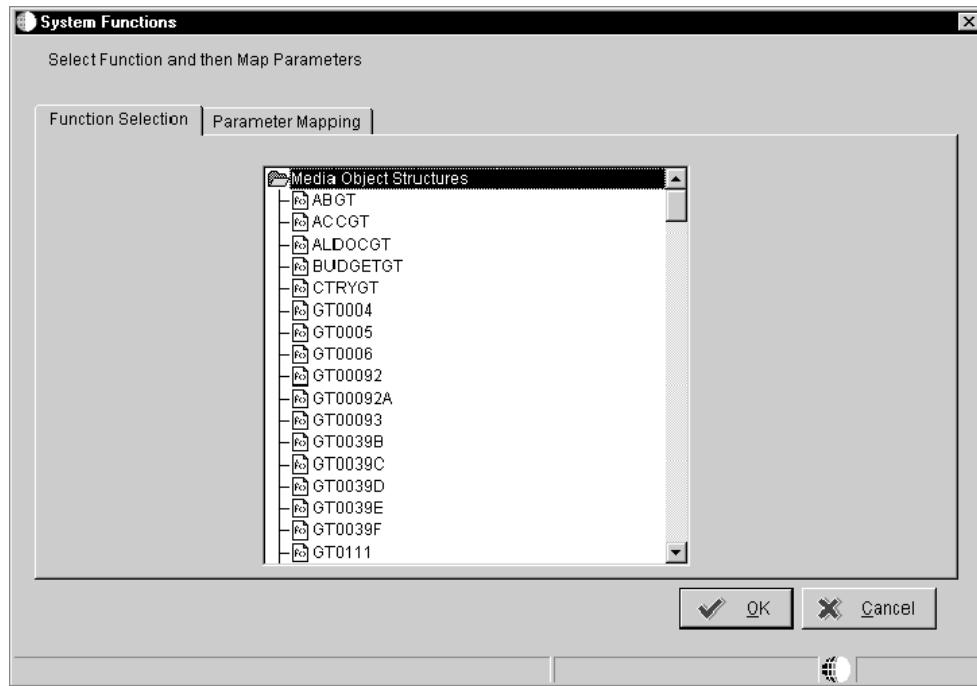
Edit mode allows the user to make changes; display mode is read-only.

- 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 ERP 8.0 Development Tools Guide.

Working with Media Object Queues

ERP 8.0 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 ERP 8.0.

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 ERP 8.0. Within ERP 8.0, 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)

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:

- 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 ERP 8.0. In ERP 8.0, 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 ERP 8.0 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 ERP 8.0 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.

ERP 8.0 Text Items

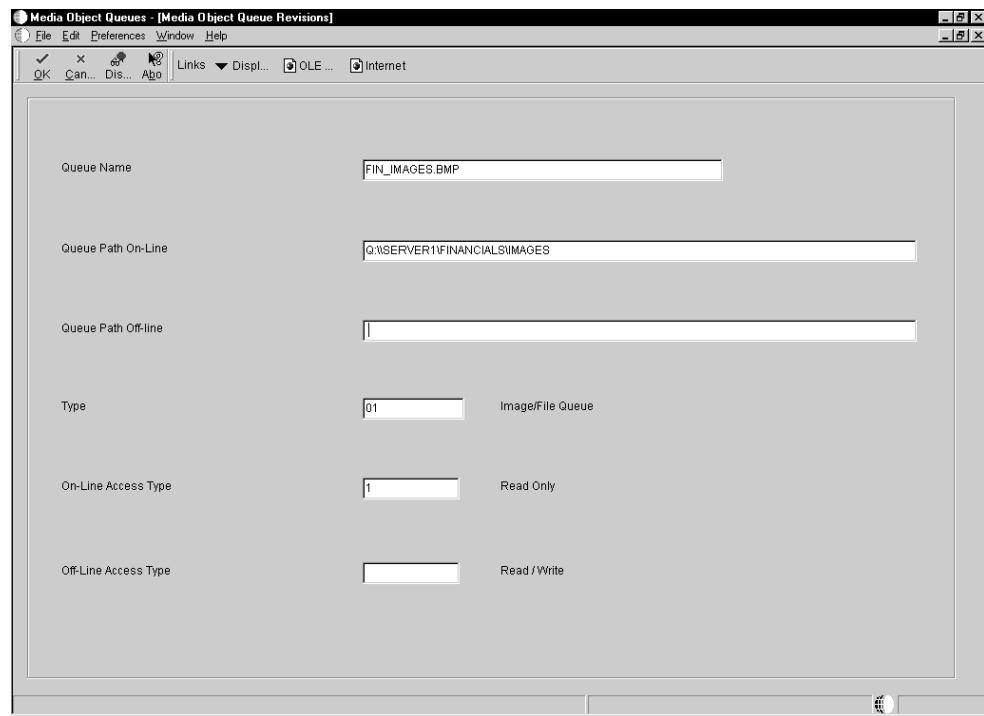
Text items are items that you create using the ERP 8.0 media objects word processor. They do not require Media Object Queues. The Media Objects Storage table (F00165) contains both the associated key value of the data record to which the text media object is attached, and the text itself. Text items that originate from applications external to ERP 8.0 (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.



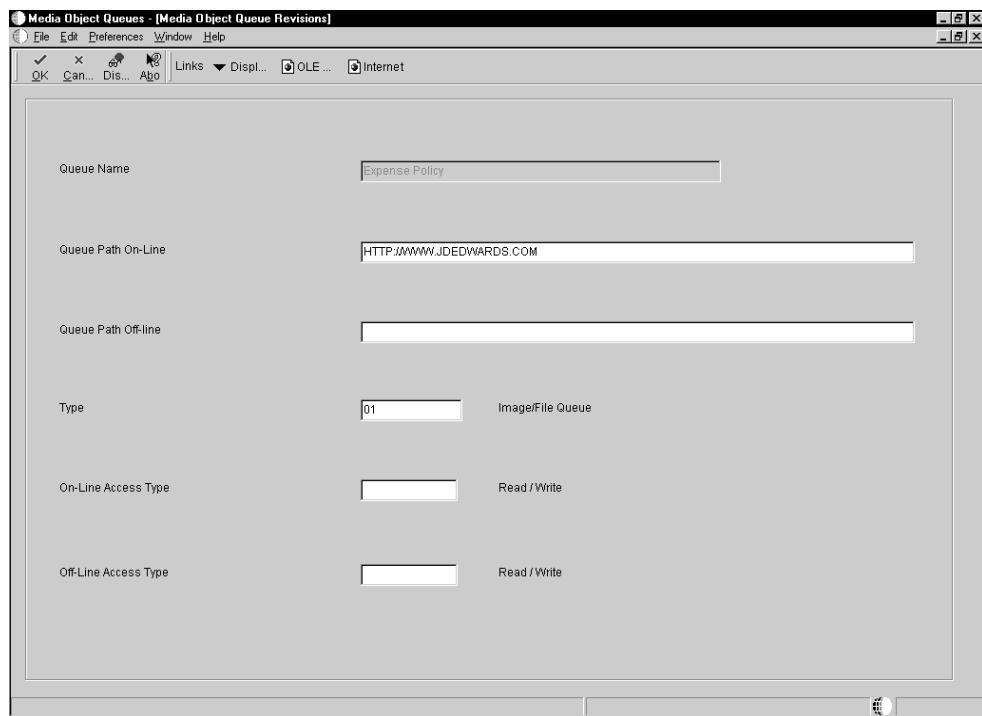
3. On the Media Object Queues form, complete the following fields:

- Queue Name
- Queue Path On-Line
- Queue Path Off-line
- Type
- On-Line Access Type
- Off-Line Access Type

► 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 ERP 8.0 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.

ERP 8.0 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, ERP 8.0 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 ERP 8.0. 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 ERP 8.0 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 ERP 8.0.

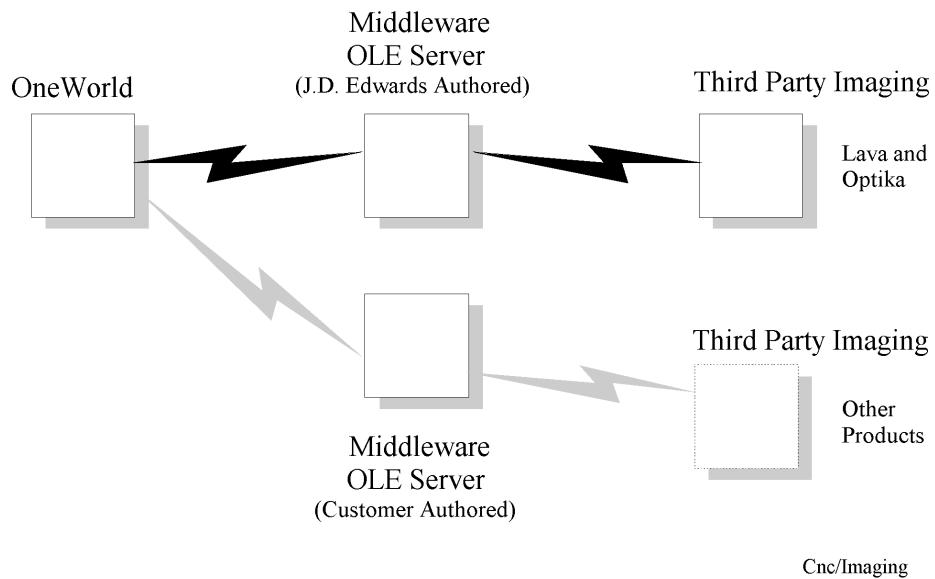
Understanding Flow for Imaging Systems

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.

ERP 8.0 has the ability to retrieve and view documents, based on selection criteria that a user defines. A linking system ties the ERP 8.0 transaction to the document for later retrieval and reference. You can attach a ERP 8.0 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 ERP 8.0 supports third-party imaging products through a middleware OLE server layer. Customers can also create their own OLE servers to support additional imaging systems.

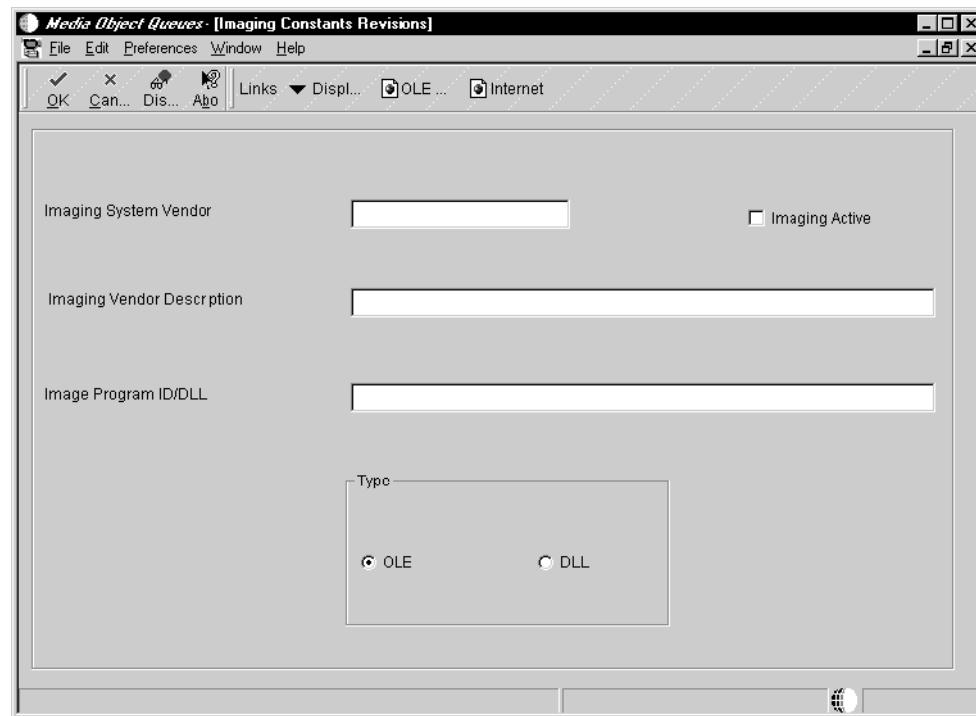


Imaging Process Flow

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

Universal Table Browser

Universal Table Browser

If you want to view the data in tables in different databases, you can use ERP 8.0'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

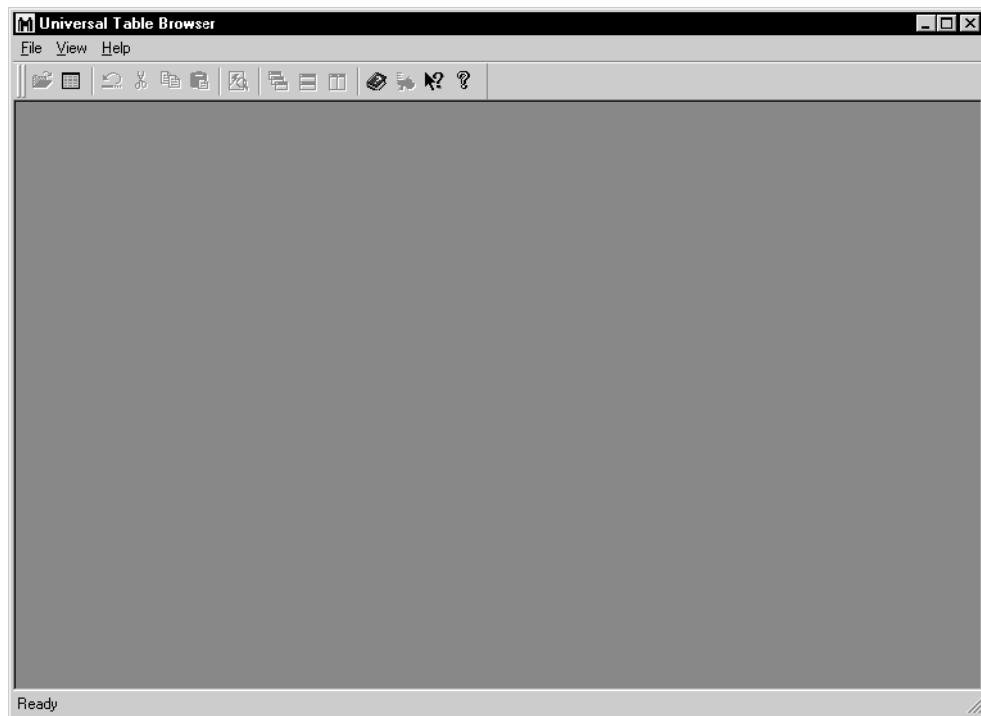
If you want to view the data in tables in different databases, you can use ERP 8.0's Universal Table Browser. This tool lets you verify the existence of data in a table as well as determine the table's structure. The Universal Table Browser uses JDEBASE APIs to retrieve data from the database, making it independent of the database you access.

Note:

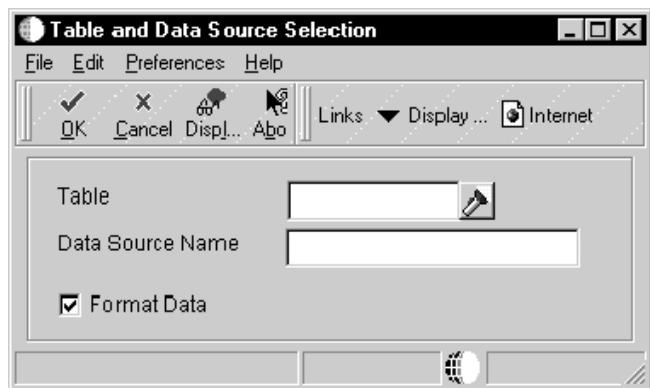
All column and row security that you set up through Security Workbench applies to the Universal Table Browser. See [Working With Security Workbench](#).

► 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

4. Click the following option:

- Format Data

The Query By Example (QBE) function is operable as in any other ERP 8.0 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 ERP 8.0 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.

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 is not formatted, and it is shown exactly as it is stored in the database.

The screenshot shows a window titled "Universal Table Browser - [Address Book Master - F0101(UnFormatted) - ACCESS32]". The window has a menu bar with File, View, Window, and Help. Below the menu is a toolbar with icons for New, Open, Save, Print, and Find. The main area is a grid table with the following columns: ABAN8, ABALKY, ABTAX, ABALPH, ABDC, ABMCU, ABSIC, and ABL. The ABAN8 column contains various numeric values starting with 1.0000000000000000. The ABALPH column contains company names like "Financial Distributor", "Project Manager", "Financial Report", etc. The ABMCU column contains the value 1 for all rows. The ABSIC column is empty. The ABL column is also empty. At the bottom of the grid, there is a status bar with "Grid Rows: 40" and "Ready".

ABAN8	ABALKY	ABTAX	ABALPH	ABDC	ABMCU	ABSIC	ABL
1.0000000000000000		43.078.849/001	Financial Distributor	FINANCIALDISTRI	1		
50.00000000000000			Project Manager	PROJECTMANAG	1		
60.00000000000000			Financial Report	FINANCIALREP	1		
70.00000000000000			French Curripar	FRENCHCOMPFA	1		
77.00000000000000			Canadian Comp	CANADIANCOMP	1		
80.00000000000000			Colombian Comp	COLOMBIANCOMP	1		
200.00000000000000			Manufacturing/Op	MANUFACTURIN	1		
249.00000000000000			Model Energy &	MODELENERGY	1		
1001.00000000000000		73.058.653/0001	Edwards, J.D. &	EDWARDSJDCC	1		
2006.00000000000000	523735321		Waters, Annette	WALTERSANNE	1		
2129.00000000000000	343238761		Jackson, John	JACKSONJOHN	1		
3001.00000000000000			Global Enterprises	GLOBALENTERI	1		
3002.00000000000000			Atlantic Corporation	ATI ANTICCORP	1		
3003.00000000000000			CSC Corporation	CSCCORPORAT	1		
3004.00000000000000			Pacific Company	PACIFICCOMPAY	1		
3005.00000000000000			Technology Systems	TECHNOLOGYS	1		
3333.00000000000000			Continental Inc	CONTINENTALIN	1		
3480.00000000000000			Digger Incorporated	DIGGERINCORP	1		
4010.00000000000000			Colorado State T	COLORADOSTA	1		

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.

The screenshot shows a window titled "Universal Table Browser - [Address Book Master - F0101 - ACCESS32]". The menu bar includes "File", "View", "Window", and "Help". Below the menu is a toolbar with icons for file operations. The main area is a grid table with the following columns:

	ABAN8	ABALKY	ABTAX	ABALPH	ABDC	ABMCU	ABSIC	ABL
1			43.078.849/001	Financial/Distrib	F NANCIALDISTI	1		
50				Project Manager	PROJECTMANA	1		
60				Financial Report	F NANCIALREPC	1		
70				French Company	FRENCHCOMPFA	1		
77				Canadian Comp	CANADIANCOMF	1		
80				Colombian Comp	COLOMBIANCOT	1		
200				Manufacturing/Div	MANUFACTURIN	1		
249				Model Energy &	MODELENERGY	1		
1001			73.058.653/000	Edwards, J.D. &	EDWARDSJDCC	1		
2006			523735321	Waters, Annette	WALTERSANNE	1		
2129			343238761	Jackson, John	JACKSONJOHN	1		
3001				Global Enterprises	GLOBALENTERF	1		
3002				Atlantic Corporation	ATI ANTICCORP	1		
3003				CSC Corporation	CSCCORPORAT	1		
3004				Pacific Company	PACIFICCOMPAl	1		
3005				Technology Systems	TECHNOLOGYS	1		
3333				Continental Inc.	CONTINENTALIF	1		
3480				Digger Incorporated	DIGGERINCORF	1		
4010				Colorado State	COLORADOSTA	1		

At the bottom of the grid, there are buttons for "Grid Rows:40", "Cancel", and "Ready".

► 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 ERP 8.0 data dictionary item USEQ. The SQL database name for this ERP 8.0 item is DTUSEQ.

Column Properties

SQLColumnName:	DTLUSEQ	Glossary Group	
Long Name:	UserDefinedCodeSequence	Can Have Security ?	
Alias:	USEQ	Next Number System:	
Size:	4	Search Form Name:	
ID Dictionary:	USEQ	Edit Rule:	
System Code:	00	Display Rule:	[CODE:4]
Data Type:	EVDT_MATH_NUMERIC	C Driver Type:	JDEDB_C_DOUBLE
Decimals Stored:	0	Offset in Buffer:	39
Decimals Displayed:	1	Actual Type:	8
Currency Column:	0	Precision:	15
<input type="button" value="OK"/>			

ERP 8.0 Naming Conventions

ERP 8.0 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

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

Specific naming convention exceptions for the Client Access data source are as follows:

- 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. ERP 8.0 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

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 ERP 8.0. Specific versions of the file must reside on every ERP 8.0 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 ERP 8.0 Explorer.

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 ERP 8.0 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 ERP 8.0 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."

See Also

- ❑ *OneWorld® Java Server Installation Guide*
- ❑ *OneWorld® Interoperability Guide*
- ❑ *XPIe Foundation Installation and Configuration Guide*
- ❑ *OneWorld® Enterprise Workflow Guide*

[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 ERP 8.0.
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 ERP 8.0 uses to find specifications to display 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.
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 ERP 8.0.
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.
ThousandsSeparator= ,		Sets the default character for ThousandsSeparator; the default can be set to any character except a number. This value should match the ThousandsSeparator specified by the client operating system. Note: The INI file does not support the use of a space. If a space or non-blocking space must be specified, use the strings SPACE or NB_SPACE instead.
DecimalSeparator= .		Sets the default character for DecimalSeparator; the default can be set to any character except a number. This value should match the DecimalSeparator specified by the client operating system. Note: The INI file does not support the use of a space. If a space or non-blocking space must be specified, use the strings SPACE or NB_SPACE instead.

[DB SYSTEM SETTINGS - SECONDARY]

This section is used for workstations only. The settings are used for a secondary data source to start ERP 8.0, 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 ERP 8.0 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 ERP 8.0.

Default User=	JDE	The user account name for the database bootstrap tables.
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 ERP 8.0 uses to find specifications to display signon information before an environment is selected.
Base Datasource=	ERP 8.0 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=	ERP 8.0 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 ERP 8.0.
Decimal Shift=	N	A flag to indicate if decimal shifting is 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 table names are to be 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 jddebug.log. The settings are also used to turn your jddebug.log on and off.

Setting	Typical Value	Purpose
---------	---------------	---------

TAMMultiUserOn= 0

Output=	None	Controls the status of the jdedb file. Valid values are: NONE. No trace information is written to jdedb.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 jdedb.log.
ServerLog=	0 (default) or 1	0 disables the workstation requesting the business function JDE.LOG and JDEDEBUG.LOG 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:\jdedb.log	The location and name of the jdedb.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)	This setting enables (1) or disables (0) the ability to right-click on a

packages)	data dictionary item and display its alias.
1 (default for APPL packages)	

[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 ERP 8.0 foundation code and tools.
ClientPath=	ERP 8.0 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 Language Overview in the ERP 8.0 Upgrade Guide (B73.3.3) for other values.
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 ERP 8.0 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 ERP 8.0 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.
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[JAS PREFERENCE]

Setting	Typical Value
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JasServer= ownsts1

Port= 80

Servlet= /jde/servlet/html.login

[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= \$(COMP)\VC98\include;\$(SYSTEM)\include;
\$(SYSTEM)\cg;
\$(APP)\include;
\$(SYSTEM)\includev

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 ERP 8.0 Foundation. This value is updated by a workstation installation, based on the user's deployment preferences.

MAKEDIR= \$(COMP)\VC98\bin;
\$(COMP)\Common\MSDev98\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
ClientType=	Windows	Defines whether the application shortcut attached to an external e-
or		
HTML		mail message will contain a Windows application shortcut or a URL for an HTML application shortcut. The default value is Windows.
mailProfile=	Default Profile	The name of the profile to be used for external mail systems that are accessed through ERP 8.0 Work Center. Examples of external mail servers include Microsoft Exchange Server and Lotus Domino Mail Server.
mailServer=	owssmtp.jdedwards.com	The domain name of the SMTP server to be accessed for sending server mail messages.

[JDENET]

Setting	Typical Value	Purpose
serviceNameListen=	6005	Specifies the communications service port on the TCP/IP network. ERP 8.0 uses this port address to listen for requests on the network.
serviceNameConnect=	6005	Specifies the communications service port on the TCP/IP network. ERP 8.0 uses this port address to connect to the network.
		OCM determines on which server a business function runs. If you run multiple instances of ERP 8.0 on the same server, each instance runs on a different port. The serviceNameConnect parameter value determines the ERP 8.0 instance that will handle the business function request.
maxLenInlineData=	1024	For internal use only.
maxLenFixedData=	4096	For internal use only.
maxFixedDataPackets=	1024	For internal use only.
netTrace=	0	Turns netTrace on or off. The default setting of 0 means that netTrace is OFF. A setting of 1 enables JDENET debug log messages. You can use these log messages for debugging purposes.
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	Typical Value	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 ERP 8.0.
PrintImmediate=	FALSE (default) or TRUE	ERP 8.0 servers hold the UBE spool files submitted from a ERP 8.0 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 ERP 8.0 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/ActivEra"	This setting indicates the URL for the ActivEra portal for Pure

		JAS and Hybrid portal scenarios. The default is No Entry.
PortalURL	"modelstore2/activera12"	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
PDEV7334	PDEV7334WP	These settings contain the environment name. The typical value is the web/WAN version of that same environment.
P7334ASD2	7334ASD2W	
P7334HPO2	P7334HPO2W	

[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)	<p>Typically, ERP 8.0 uses this setting for workstations after they initially load packages from a deployment server. The values for this setting are:</p> <ul style="list-style-type: none"> • 0=off • 1=on <p>ERP 8.0 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 ERP 8.0 synchronizes the replicated tables on the publisher and the subscriber, ERP 8.0 either changes the value from 1 to 0 or writes this setting into the jde.ini file with a value of 0.</p>

[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, ERP 8.0 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, ERP 8.0 uses the ERP 8.0 security server.
ShowUnifiedLogon=	0 or 1 (default)	This setting determines whether the ERP 8.0 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 JDEKRLN.
EnvironmentName=		
SpecPath=	spec	This line and all of the following lines in this section specify the path names that enables other ERP 8.0 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 svstem 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.
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.
Iconpath=	locale\lconv	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)	<p>This setting identifies to ERP 8.0 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.</p> <p>A standard ERP 8.0 distribution also includes a test driver called TestDriver. When you enter this driver name, the setting would look like this:</p> <pre>ProgID=OWTAPI.TestDriver.1</pre>

[TAPI - driver]

Setting	Value	Purpose
Host=	The host and port number for the telephony driver. For example:	
Port=	Host=ctiserver1.jdedwards.com Port=8001	This section is for third-party telephony drivers that have additional configuration settings. For example, you might need to specify the host and port number for the third-party telephony product. You can obtain the entries for this section from the driver vendor or the Worldwide Customer Support administrator.

[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 c:\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=	FALSE	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 ERP 8.0 running on it. Typically the name will be the name of the ERP 8.0 service running on the server, such as JDEDWARDS_ONEWORLD_B733_SP20. 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 ERP 8.0 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.

See Also

- ❑ *OneWorld® Java Server Installation Guide*
- ❑ *OneWorld® Interoperability Guide*
- ❑ *XPIle Foundation Installation and Configuration Guide*
- ❑ *OneWorld® Enterprise Workflow Guide*

[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 ERP 8.0 to compile business functions.
CRTMOD2=	DEFINE(JDENV_AS400MUTEX 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 JDEKRLN 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 ERP 8.0 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 ERP 8.0 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 DBDRVVDLI	See Purpose for CRTDBPGM1.
CRTDBPGM3=	DBSQL DBSQL_A DBSQL_D DBSQL_I DBSQL_M DBSQL_S DBSQL_U DBSQL_X	See Purpose for CRTDBPGM1.
CRTDBPGM4=	BNDSRVPGM(JDEKRLN 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 ERP 8.0 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 ERP 8.0 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_VERSION 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.
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, JDEKRLN, 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 ERP 8.0 user profile doing the submitting.
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[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 ERP 8.0.
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
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 ERP 8.0.
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 table names are to be qualified by owner.
Secured=	Y (default) or	Indicates whether or not this is a secured

	N	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.
DatabaseProgramMax=	-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 ERP 8.0 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.
DatabaseProgramCheckIntervalSeconds=	10 (default)	AS/400 only. The length, in seconds, before ERP 8.0 will be put to sleep after the database connection programs are created.
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	<p>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:</p> <p>The message CPF7099 is sent to the journal message queue if the journal has the MBGRCV(*USER) attribute.</p> <p>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.</p> <p>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.</p>
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[DEBUG]

The settings in this section determine the location of the jde.log and jddebug.log. The settings are also used to turn your jddebug.log on and off.

Setting	Typical Value	Purpose
Output=	FILE	<p>Controls the status of the jddebug log file. Valid values are:</p> <p>NONE. No trace information is written to jddebug.log.</p> <p>FILE. Database and runtime trace information is written to the file specified by the DebugFile= parameter in the [DEBUG] section.</p>
Trace=	TRUE	Writes additional trace information to the log files to aid in debugging.
DebugFile=	JDEB733/ jddebug	<p>Location of the jddebug log. J. D. Edwards ships ERP 8.0 with this value set to jddebug. No processes update this value. The names of the resulting files will be path/jddebug_#####.log, where ##### represents the AS/400 job number associated with the job that created the file.</p> <p>Note:</p> <p>ERP 8.0 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</p>

		view some of the smaller log files.
		See Using AS/400 Integrated File System Logging Support 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 ERP 8.0 with this value set to the jde.log. No processes update this value. Examine the log files jde.log, and jdedb for information useful to assist in problem analysis and resolution. The names of the resulting files will be path/jde #####.log where ##### is the AS/400 job number associated with the job that created the file. See Using AS/400 Integrated File System Logging Support 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.
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 ERP 8.0 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 Language Overview in the ERP 8.0 Upgrade Guide (B73.3.4) 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	Controls the level of interprocess communications (IPC) messages written to the jdedebug.log. Valid values are: 0 (default) to write no messages to the debug log, 1 to write only general trace messages, 2 to write IPC handle state trace messages, and 3 to write both general and IPC handle state trace messages.

[JDEMAIL]

Setting	Typical Value	Purpose
mailServer= owsmt.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	Specifies the communications service port on the TCP/IP network. ERP 8.0 uses this port address to listen for requests on the network.
serviceNameConnect=	jde_server	Specifies the communications service port on the TCP/IP network. ERP 8.0 uses this port address to connect to the network.
maxNetProcesses=	Dependent on the maximum number of concurrent ERP 8.0 users the system is expected to handle, as well as the processing and memory power of the server.	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=	Dependent on the maximum number of concurrent ERP 8.0 users the system is expected to handle, as well as the processing and memory power of the server.	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=	Depends on several factors: <ul style="list-style-type: none"> • Total of the individual kernel type maximums. The value should be at least that large, but it be increased as needed • The number of one-user-only kernels you want to allow. Any number above the individual kernel maximum total will be allocated to one-user-only kernels • The room you want to allow for dynamic increase of kernel processes from the Server Administration Workbench. 	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=	20	The number of dedicated servers and types.
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	0	
Connects=		

[JDENET_KERNEL_DEFx]

This section defines internal dedicated server processes for JDENET. The sections are numbered JDENET_KERNEL_DEF1 to JDENET_KERNEL_DEF20. 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 DEF2: UBE KERNEL DEF3: REPLICATION KERNEL DEF4: SECURITY KERNEL DEF5: LOCK MANAGER KERNEL DEF6: CALL OBJECT KERNEL	DEF1: Used for internal purposes and testing. DEF2: Processes ERP 8.0 batch process requests. DEF3: Processes data replication requests. DEF4: Processes security server requests.

	DEF7: JDBNET KERNEL	DEF5: Processes transaction manager and lock manager requests.
	DEF8: PACKAGE INSTALL KERNEL	DEF6: Processes requests for remote master business functions (MBF).
	DEF9: SAW KERNEL	DEF7: Processes JDBNet server-to-server requests.
	DEF10: SCHEDULER KERNEL	DEF8: Processes package installation requests.
	DEF11: PACKAGE BUILD KERNEL	DEF9: Processes SAW application requests.
	DEF12: UBE SUBSYSTEM KERNEL	DEF10: Processes Secheduler application requests.
	DEF 13: WORKFLOW KERNEL	DEF11: Processes package build requests.
	DEF 16: XML LIST KERNEL	DEF12: Processes UBE subsystem requests.
	DEF 19: EVENT NOTIFICATION KERNEL	DEF13: Processes workflow requests
	DEF 20: INTEROPERABILITY EVENT OBSERVER KERNEL	DEF16: Processes and returns request for data in XML document format.
		DEF19: Processes real-time events and XML documents generated by the Interoperability Event Observer, as well as Z file events. Publishes all ERP 8.0 events to subscribers.
		DEF20: Processes information from business functions calling real-time APIs and uses that information to create and XML or a Z file publishable to subscribers by the Event Notification Kernel.
dispatchDLLName=	DEF1: JDENET DEF2: JDEKRLN DEF3: JDEKRLN DEF4: JDEKRLN DEF5: JDEKRLN DEF6: JDEKRLN DEF7: JDEKRLN DEF8: JDEKRLN DEF9: JDESAW	Identifies the name of the JDENET service program.

	DEF10: JDEKRNL	
	DEF11: JDEKRNL	
	DEF12: JDEKERNEL	
	DEF13: JDEKRNL	
	DEF16: XMLLIST	
	DEF19: JDEIE	
	DEF20: JDEIEO	
dispatchDLLFunction=	DEF1: JDENET_Dispatch Message DEF2: JDEK_DispatchUBEMessage DEF3: DispatchRepMessage 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 DEF13: JDEK_WFServerProcess DEF16: JDEK_XMLListDispatch DEF19: JDEK_DispatchITMessage DEF20: JDEK_DispatchIEOMessage	The name of the JDENET function for handling JDENET messages. The dispatchDLLName and dispatchDLLFunction entries are platform specific.
maxNumberOfProcesses=	Dependent on the number of concurrent users and kernel types. For example, CallObject kernels should be configured to start five to 10 concurrent users per kernel.	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= <i>Variable</i>	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.
	The decision on assigning a value to this parameter should be based on when the user wants the overhead of starting a kernel process to occur: when ERP 8.0 services start or when the first message for kernel type is received.

[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 ERP 8.0 uses special password handling for batch reports running on the server. Set the value to TRUE to instruct ERP 8.0 to enable special handling of passwords. Set the value to FALSE to disable special handling. When ERP 8.0 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 ERP 8.0. When enabled, ERP 8.0 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". ERP 8.0 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 ERP 8.0 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 ERP 8.0. 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 ERP 8.0 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 ERP 8.0 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=	FALSE	Used to turn on and off asynchronous workflow. The default value is FALSE.

[WORLD ENVIRONMENT MAP]

Setting	Value	Purpose
<i>OneWorldEnvironmentName</i> = (for example, APPLJDEDC2)	<i>WorldEnvironment Name</i> (for example, QA73COMP)	The string used by special business function code to set up WorldSoftware library lists from within ERP 8.0. The library lists call WorldSoftware from ERP 8.0. As of B73.3; the functions associated with these settings might not be utilized by application developers.

[INTEROPERABILITY]

Setting	Typical Value	Purpose
RegisteredEvents=	RTSOOUT	Names of EventTypes. An event is a ERP 8.0 business transaction running on a ERP 8.0 enterprise server. To enable real-time generation of events, you must register each event that you want to generate in real time.
FilteredEvents=	*ALL	The value of this parameter defines the events that you want to create in real time. A value of *ALL generates all registered events. *NONE disables event generation. You can also enter a subset of registered events.

[SAMPLE_EVENT]

Setting	Typical Value	Purpose
DS1= DS2= DS3=	D4202150B D4202150C D34A1050C	Defines the data structure for each real-time event registered in the [INTEROPERABILITY] section. Replace [SAMPLE_EVENT] with an event name, such as RTSOOUT, then enter the values that define the data structure of the event.

[JDEITDRV]

Setting	Typical Value	Purpose
DrvCount=	3	The number of event drivers used for processing messages from event generators, either Z file or real time.
Drv1=	Z:ZDRV	The directory location of the Z file event driver.
Drv2=	RT:RTDRV	The directory location of the real-time event driver.
Drv3=	JDENET:JDETRDRV	The directory location of the JDENET driver.

[LREngine]

Setting	Typical Value	Purpose
System=	/B7334SYS_X (you must use the integrated file system (IFS)).	The directory location of the List-Retrieval Engine, a database used to manage access to XML repository files.

Understanding UNIX Server jde.ini Settings (HP9000, RS/6000, or Sun Servers)

This section describes in detail the settings found in the ERP 8.0 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.

See Also

- ❑ *OneWorld® Java Server Installation Guide*
- ❑ *OneWorld® Interoperability Guide*
- ❑ *XPIe Foundation Installation and Configuration Guide*
- ❑ *OneWorld® Enterprise Workflow Guide*

[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) -02 (default for RS/6000 and Sun)	Machine dependent. These compile flags are used when building business functions in "Release" mode. You should not change these flags.
DebugFlags=	-g -y -D_DEBUG -DJDEDEBUG (default for HP9000) -g -qfulpath -qdbextra -D_DEBUG -DJDEDEBUG (default for RS/6000) -g -D_DEBUG -DJDEDEBUG (default for Sun)	Machine dependent. These compile flags are used when building business functions in "Debug" mode. You should not change these flags.
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)	

CompilerFlags=	<pre>-Aa +w1 +z -c (default for HP9000) -qalign=natural -qflag=l:l -c (default for RS/6000) -qspill=1024 -misalign -KPIC (default for Sun)</pre>	Machine dependent. Valid compiler flags.
OSReleaseLevel=	<pre>+DAPortable (for HP-UX only) -q32 (for AIX)</pre>	The release level to which you are compiling. You should not change these flags.
LinkFlags=	<pre>-b -z -ljesaw -L/usr/jdedwardsoneworld/BDEV/system/lib (default for HP9000) -b -z -B symbolic -ljesaw -L/usr/jdedwardsoneworld/BDEV/system/lib (HP9000 only) -B symbolic -ljesaw -L/usr/jdedwardsoneworld/BDEV/system/lib (HP9000 only) - bl:/usr/oneworld/BDEV/b733/system/bin32/funclist.imp -bM:SRE -bexpall -brtl -lc -bnoentry -L - L/usr//jdedwardsoneworld/BDEV/b733/system/ib -lm -lidelib -lcallobj -lerror -lgentext -l gdb -l jde_erk -ljdecache -ljdecache -ljdeddapi -l jdeknet -ljderepl -l jdeschr -l jdesec -l jdespec -l jdetam -llanguage -l misc -l package -l port -l rdbapi -l runtime -l src -l transmon -lube -l workflow -l jdenet -l broadmap:loadmap -l jdesaw (default for RS/6000) - bl:/usr//jdedwardsoneworld/BDEV/b733/system/bin32/funclist.imp -bM:SRE -bexpall -brtl -lc -lm -bnoentry -L - L/usr//jdedwardsoneworld/BDEV/b733/system/ib -lm -lidelib -lcallobj -lerror -lgentext -l gdb -l jde_erk -ljdecache -ljdecache -ljdeddapi -l jdeknet -ljderepl -l jdeschr -l jdesec -l jdespec -l jdetam -llanguage -l misc -l package -l port -l rdbapi -l runtime -l src -l transmon -lube -l workflow -l jdenet -l ower -l broadmap:loadmap -l jdesaw (default for AIX) -G -L\$ -l jdesaw (ORACLE_HOME)/lib -L/usr/jdedwardsoneworld/BDEV/system/lib (default for Sun)</pre>	<p>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.</p> <p>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 different path code.</p> <p>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.</p> <p>The settings -ljesaw 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.</p>
LinkLibraries=	blank (default)	Libraries to which business functions are linked. (Windows NT and AS/400 servers only.)

SimultaneousBuilds= 0 (unlimited) (default)	
	any integer (number of simultaneous builds)
	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 ERP 8.0, this setting specifies either a primary server where ERP 8.0 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 ERP 8.0.
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) PDEVRS02 (default for RS/6000)	The default data source on the workstation or the enterprise server.
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.
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 ERP 8.0.

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 jdededbug.log. The settings are also used to turn your jdededbug.log on and off.

Setting	Typical Value	Purpose
Output=	FILE	Controls the status of the jdededbug file. Valid values are: NONE. No trace information is written to jdededbug.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 jdededbug.log.
Trace=	TRUE	Writes additional trace information to the log files to aid in debugging.
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=	jdededbug.log	The location and name of the jdededbug.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 ERP 8.0 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.
B7334=	/usr//jdedwardsnewworld/b7334	Base path of the ERP 8.0 installation.
Double_Byte=	0	
LocalCodeSet=	WE_ISO88591	A setting used to determine alternate language usage. See Language Overview in the ERP 8.0 Upgrade Guide (B73.3.4) for other values.

[JDEIPC]

Setting	Typical Value	Purpose
ipcTrace=	0	Set to 1 to enable IPC logging messages. Caution: 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= owsmtplib.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	The port number or service name used by ERP 8.0 to communicate with clients and other servers.
serviceNameConnect=	jde_server	The port number or service name used by ERP 8.0 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=	20	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.
HandleKrnlsSignals=	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 the kernel process handles the signal, performs some cleanup tasks, and exits. Parameter value of 0 turns off 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 ERP 8.0 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 ERP 8.0 temporary files.
newProcessThreshold	0	
Connects=		

[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 DEF2: UBE KERNEL DEF3: REPLICATION KERNEL DEF4: SECURITY KERNEL DEF5: LOCK MANAGER KERNEL DEF6: CALL OBJECT KERNEL DEF7: JDBNET KERNEL DEF8: PACKAGE INSTALL KERNEL DEF9: SAW KERNEL	DEF1: Used for internal purposes and testing. DEF2: Processes ERP 8.0 batch process requests. DEF3: Processes data replication requests. DEF4: Processes security server requests. DEF5: Processes transaction manager and lock manager requests. DEF6: Processes requests for remote master business functions (MBF). DEF7: Processes JDBNet server-to-

	DEF10: SCHEDULER KERNEL	server requests.
	DEF11: PACKAGE BUILD KERNEL	DEF8: Processes package installation requests.
	DEF12: UBE SUBSYSTEM KERNEL	DEF9: Processes SAW application requests.
	DEF 13: WORKFLOW KERNEL	DEF10: Processes Scheduler application requests.
	DEF 16: XML LIST KERNEL	DEF11: Processes package build requests.
	DEF 19: EVENT NOTIFICATION KERNEL	DEF12: Processes UBE subsystem requests.
	DEF 20: INTEROPERABILITY EVENT OBSERVER KERNEL	DEF13: Processes workflow requests
		DEF16: Processes and returns request for data in XML document format.
		DEF19: Processes real-time events and XML documents generated by the Interoperability Event Observer, as well as Z file events. Publishes all ERP 8.0 events to subscribers.
		DEF20: Processes information from business functions calling real-time APIs and uses that information to create and XML or a Z file publishable to subscribers by the Event Notification Kernel.
dispatchDLLName=	DEF1: libjdenet.sl (default for HP9000) or libjdenet.so (default for RS/6000 and Sun)	Identifies the name of the 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 libideknet.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)
	DEF13: libworkflow.so (default for HP9000 and Sun) or libworkflow.sl (default for RS/6000)
	DEF16: libxmllist.so (Sun/AIX); libxmllist.sl (HP9000)
	DEF19: libjdeie.so (Sun/AIX); libjdeie.sl (HP9000)
	DEF20: libjdeieo.so (Sun/AIX); libjdeieo.sl (HP9000)
dispatchDLLFunction=	<p>DEF1: JDENET_Dispatch Message</p> <p>DEF2: JDEK_DispatchUBEMessage</p> <p>DEF3: DispatchRepMessage</p> <p>DEF4: JDEK_DispatchSecurity</p> <p>DEF5: TM_DispatchTransactionManager</p> <p>DEF6: JDEK_DispatchCallObject Message</p> <p>DEF7: JDEK_DispatchJDBNETMessage</p> <p>DEF8: JDEK_DispatchPkgInstallMessage</p> <p>DEF9: JDEK_DispatchSAWMessage</p> <p>DEF10: JDEK_DispatchScheduler</p> <p>DEF11: JDEK_DispatchPkgBuildMessage</p>

	DEF12: JDEK_DispatchUBESBSMessage	
	DEF13: JDEK_DispatchWFServer Process	
	DEF16: JDEK_XMLListDispatch	
	DEF19: JDEK_DispatchITMessage	
	DEF20: JDEK_DispatchIEOMessage	
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
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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
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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
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User= JDESVR The ERP 8.0 user.

Password= JDESVR The ERP 8.0 password.

DefaultEnvironment= PDEVHP02
(default for F98OWSEC.
HP9000)

PDEVRS02
(default for
RS/6000)

DataSource= ORACLE PVC B7334 The name of the ERP 8.0 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 ERP 8.0 uses special password handling for batch reports running on the server. Set the value to TRUE to instruct ERP 8.0 to enable special handling of passwords. Set the value to FALSE to disable special handling. When ERP 8.0 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 ERP 8.0. When enabled, ERP 8.0 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". ERP 8.0 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 name	Each setting in this section lists the environment to which each server is mapped.

[SVR]

The settings in this section contain environment and subdirectory information.

Setting	Typical Value	Purpose
EnvType=	1	Used by JDEKRLN
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 ERP 8.0 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=	FALSE	Used to turn on and off asynchronous workflow. The default value is FALSE.

[INTEROPERABILITY]

Setting	Typical Value	Purpose
RegisteredEvents=	RTSOOUT	Names of EventTypes. An event is a ERP 8.0 business transaction running on a ERP 8.0 enterprise server. To enable real-time generation of events, you must register each event that you want to generate in real time.
FilteredEvents=	*ALL	The value of this parameter defines the events that you want to create in real time. A value of *ALL generates all registered events. *NONE disables event generation. You can also enter a subset of registered events.

[SAMPLE_EVENT]

Setting	Typical Value	Purpose
DS1= DS2= DS3=	D4202150B D4202150C D34A1050C	Defines the data structure for each real-time event registered in the [INTEROPERABILITY] section. Replace [SAMPLE_EVENT] with an event name, such as RTSOOUT, then enter the values that define the data structure of the event.

[JDEITDRV]

Setting	Typical Value	Purpose
DrvCount=	3	The number of event drivers used for processing messages from event generators, either Z file or real time.
Drv1=	Z:libzdrv.so (Sun and AIX); Z:libzdrv.sl (HP9000)	The directory location of the Z file event driver.
Drv2=	RT:librtdrv.so (Sun and AIX);' RT:librtdrv.sl (HP9000)	The directory location of the real-time event driver.
Drv3=	JDENET:libjdetdrv.so (Sun and AIX); JDENET:libjdetdrv.sl (HP9000)	The directory location of the JDENET driver.

[LREngine]

Setting	Typical Value	Purpose
System=	/owdisk2/oneworld/b9_bdev/output	The directory location of the List-Retrieval Engine, a database used to manage access to XML repository files.

Understanding Windows NT Enterprise Server jde.ini Settings

This section describes in detail the settings found in the ERP 8.0 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.

See Also

- ❑ *OneWorld® Java Server Installation Guide*
- ❑ *OneWorld® Interoperability Guide*
- ❑ *XPIe Foundation Installation and Configuration Guide*
- ❑ *OneWorld® Enterprise Workflow Guide*

[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.
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	ERP 8.0 user ID used to run BSFNBuilder.exe.
Pwd=	JDE	ERP 8.0 user password used to run BSFNBuilder.exe.
PathCode=	appl_pgf	ERP 8.0 pathcode under which BSFNs will be built.

Build Area=	z:\OneWorld\b7334\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.
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 ERP 8.0. 43 is the only valid value.
Default User=		The ERP 8.0 user ID used to access the bootstrap tables, F986101 and F98611.
Default Pwd=		The ERP 8.0 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 jddebug.log. The settings are also used to turn logging on and off.

Setting	Typical Value	Purpose
DebugFile=	z: \OneWorld\b7334 \ddp\log \jddebug.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\b7334 \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\b7334 \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.
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 ERP 8.0 base installation directory.
LocalCodeSet=	WE_ISO88591	Determines the character code set used by ERP 8.0. 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 B7334	Uniquely identifies ERP 8.0 services to a single installation. The prefix tags ERP 8.0 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.
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.

[JAS PREFERENCE]

Setting	Typical Value
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JasServer= ownsts1

Port= 80

Servlet= /jde/servlet/html.login

[JDE(CG)]

Setting	Typical Value	Purpose
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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++, ERP 8.0 system, and ERP 8.0 pathcode include (header) files.

LIBS=	c:\msdev\devstudio\vc\lib	The path to Microsoft Visual C++, ERP 8.0 system, and ERP 8.0 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 ipcsvr process for registry settings. If running multiple instances of ERP 8.0 on the same enterprise server, each ERP 8.0 instance should have a unique value.
startIPCKeyValue=	7001	An integer offset used to separate globally shared memory when running multiple instances of ERP 8.0. The values of these keys for each instance of ERP 8.0 must differ by at least the value of maxNumberOfResources. The default value is 5000.
maxNumberOfResources=	1000	The maximum number of IPC resources that the ERP 8.0 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 ERP 8.0 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
ClientType=	Windows or HTML	Defines whether the application shortcut attached to an external e-mail message will contain a Windows application shortcut or a URL for an HTML application shortcut. The default value is Windows.
mailServer=	owssmtp.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 values 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 transport protocol. The default value is 6003.
serviceNameConnect=	6004 or jde_server	The TCP/IP port number used for sending communications packets. If this values 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 transport protocol. The default value is 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=	100	The maximum number of connections for all jdesnet and jdenet_n processes that are running. The default value is 100.
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=	20	The number of dedicated server types
NetHostName=		The IP address to use if multiple network cards are used on the server.
netTrace=	1	Enables JDENET log messages.
ServiceControlRefresh	1	The rate in seconds at which the Jdescctrl program refreshes its status of the services. Jdescctrl can be used instead of the Services applet to start, stop, pause, and continue ERP 8.0 net and queue services on Windows NT enterprise servers. The default value is 1.
EnablePredefinedPorts= 0		Allows ERP 8.0 net to use a predefined range of TCP/IP ports. This is required to permit the ERP 8.0 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 default value 0 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 response time when task

requests are actually sent to the servers.

PreConnectHostN	EntServer1	The name of enterprise servers that will be initialized. "N" is a positive integer, starting with 1.
NetTemporaryDir=	<i>Variable</i>	Allows the Server Administration Workbench (SAW) to create, transfer, and remove temporary log files larger than 5 MB. The variable should be the name of the temporary director SAW uses to accomplish these tasks.

[JDENET_KERNEL_DEFx]

This section defines JDENET internal dedicated server processes.

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 DEF2: UBE KERNEL DEF3: REPLICATION KERNEL DEF4: SECURITY KERNEL DEF5: LOCK MANAGER KERNEL DEF6: CALL OBJECT KERNEL DEF7: JDBNET KERNEL DEF8: PACKAGE INSTALL KERNEL DEF9: SAW KERNEL	DEF1: Used for internal purposes and testing. DEF2: Processes ERP 8.0 batch process requests. DEF3: Processes data replication requests. DEF4: Processes security server requests. DEF5: Processes transaction manager and lock manager requests. DEF6: Processes reauests for

	DEF10: SCHEDULER KERNEL	remote master business functions (MBF).
	DEF11: PACKAGE BUILD KERNEL	DEF7: Processes JDBNet server-to-server requests.
	DEF12: UBE SUBSYSTEM KERNEL	DEF8: Processes package installation requests.
	DEF 13: WORKFLOW KERNEL	DEF9: Processes SAW application requests.
	DEF 16: XML LIST KERNEL	DEF10: Processes Scheduler application requests.
	DEF 19: EVENT NOTIFICATION KERNEL	DEF11: Processes package build requests.
	DEF 20: INTEROPERABILITY EVENT OBSERVER KERNEL	DEF12: Processes UBE subsystem requests.
		DEF13: Processes workflow requests
		DEF16: Processes and returns request for data in XML document format.
		DEF19: Processes real-time events and XML documents generated by the Interoperability Event Observer, as well as Z file events. Publishes all ERP 8.0 events to subscribers.
		DEF20: Processes information from business functions calling real-time APIs and uses that information to create an XML file or a Z file publishable to subscribers by the Event Notification Kernel.
dispatchDLLName=	DEF1: jdenet.dll DEF2: jdekrnl.dll DEF3: jdekrnl.dll DEF4: jdekrnl.dll DEF5: jdekrnl.dll DEF6: jdekrnl.dll DEF7: jdekrnl.dll DEF8: jdekrnl.dll DEF9: jdesaw.dll DEF10: jdekrnl.dll	Identifies the name of the JDENET service program.

	DEF11: jdekrnl.dll	
	DEF12: jdekrnl.dll	
	DEF13: jdekrnl.dll	
	DEF16: xmllist.dll	
	DEF19: jdeie.dll	
	DEF20: jdeieo.dll	
dispatchDLLFunction=	DEF1: JDENET_Dispatch Message@28 DEF2: JDEK_DispatchUBEMessage@28 DEF3: DispatchRepMessage@28 DEF4: JDEK_DispatchSecurity@28 DEF5: JDEK_DispatchTransactionManager@28 DEF6: JDEK_DispatchCallObject Message@28 DEF7: JDEK_DispatchJDBNETMessage@28 DEF8: JDEK_DispatchPkgInstallMessage@28@28 DEF9: JDEK_DispatchSAWMessage@28 DEF10: JDEK_DispatchScheduler@28 DEF11: JDEK_DispatchPkgBuildMessage@28 DEF12: JDEK_DispatchUBESBSMessage@28 DEF13: JDEK_DispatchWFServer Process@28 DEF16: JDEK_XMMListDispatch@28 DEF19: JDEK_DispatchITMessage@28 DEF20: JDEK_DispatchIEOMessage@28	The name of the kernel function for handling kernel request messages. On Intel processors running Windows NT, the preceding underscore "_" and following "@28" are required. On Compaq AlphaServer processes running Windows NT, the preceding underscore "_" and following "@28" are omitted.
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.
BeginningMsgTypeRange=	DEF1:0 DEF2: 256 DEF3: 512 DEF4: 551 DEF5: 601 DEF6: 901 DEF7: 1201 DEF8: 1501 DEF9: 2001 DEF10: 2501 DEF11: 3001 DEF12: 3501 DEF13: 4001 DEF14: 4501 DEF16: 5256 DEF19: 12001 DEF20: 13001	The beginning message of the range for each kernel type.
endingMsgTypeRange=	DEF1: 255 DEF2: 511 DEF3: 550 DEF4: 580 DEF5: 650	The ending message of the range for each kernel type.

DEF6: 1156
 DEF7: 1456
 DEF8: 1756
 DEF9: 2256
 DEF10: 2756
 DEF11: 3256
 DEF12: 3756
 DEF13: 4256
 DEF14: 4551
 DEF16: 5512
 DEF19: 13000
 DEF20: 13256

[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 ERP 8.0 enterprise server can host record locking services.
RequestedService=	TS	The type of service that the local enterprise server's processes are requesting of the ERP 8.0 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 ERP 8.0 user ID for starting batch queues.
QPassword=	JDE	The ERP 8.0 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.
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\b7334\ddp	The parent directory for the PrintQueue directory where job files (in .pdf format) are located.

[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.
NCProductQtyCode=	JDE.IC.F41021Z1	Used with create header. Net commerce product quantity update code.
OWHostName=		ERP 8.0 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 ERP 8.0 is installed.

[SECURITY]

Setting	Typical Value	Purpose
SecurityServer=	server1	The server hosting the security services. Any server running ERP 8.0 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 - B7334	The data source where the security table (F98OWSEC) can be found. The default value is System - B7334.
SecurityMode=	0, 1, or 2	Controls whether ERP 8.0 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=	ERP 8.0_users, Bowens	A comma-delimited list of user accounts and/or groups of user accounts that are permitted to sign on to ERP 8.0 using unified logon. This allows the users to bypass the ERP 8.0 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= ENV2		Maps one environment name to another. Wherever ENV1 is to be used on the ERP 8.0 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 DLLs. 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=	resfonts	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]

Setting	Value	Purpose
UBEDebugLevel=	0 (default), 1, 2, 3, 4, 5, or 6	The level of UBE debug information placed in log files. The levels are cumulative. Valid values are: 0 = Error messages only. Logging is turned off. 1 = Informative messages 2 = Section level messages 3 = Object level messages 4 = Event rules messages 5 = SQL statements 6 = UBE function messages. Highest level of logging.
UBESubsystemLimit	3	The maximum number of concurrent subsystem jobs. The default value is 3.
UBESaveLogFile	0	Saves log files after UBE processing is complete, whether or not processing was successful. 0 (default) means the log files are deleted after UBE processing is complete.
UBEIntelNTPrint	0	Determines which print filters to use for processing .pdf files when printing on enterprise servers using Intel processors with Windows NT. Valid values are 0 (default) for J.D. Edwards print filters or 1 for Adobe Acrobat print filters.

[ACTIVE DIRECTORY]

The setting in this section is used when Active Directory is installed.

Setting	Value	Purpose
SCPToPublish	Variable. Typically use a version of ERP 8.0 running on the server, for example JD_EDWARDS_ONEWORLD_B733_SP12.	<p>Identifies the Service Connection Point (SCP) object in Active Directory. When a user signs on to ERP 8.0, ERP 8.0 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. ERP 8.0 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.</p> <p>If you move ERP 8.0 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.</p>

[INTEROPERABILITY]

Setting	Typical Value	Purpose
RegisteredEvents=	RTSOOUT	Names of EventTypes. An event is a ERP 8.0 business transaction running on a ERP 8.0 enterprise server. To enable real-time generation of events, you must register each event that you want to generate in real time.
FilteredEvents=	*ALL	The value of this parameter defines the events that you want to create in real time. A value of *ALL generates all registered events. *NONE disables event generation. You can also enter a subset of registered events.

[SAMPLE_EVENT]

Setting	Typical Value	Purpose
DS1= DS2= DS3=	D4202150B D4202150C D34A1050C	Defines the data structure for each real-time event registered in the [INTEROPERABILITY] section. Replace [SAMPLE_EVENT] with an event name, such as RTSOOUT, then

		enter the values that define the data structure of the event.
--	--	---

[JDEITDRV]

Setting	Typical Value	Purpose
DrvCount=	3	The number of event drivers used for processing messages from event generators, either Z file or real time.
Drv1=	Z:zdrv.dll	The directory location of the Z file event driver.
Drv2=	RT:rtdrv.dll	The directory location of the real-time event driver.
Drv3=	JDENET:jdetdrv.dll	The directory location of the JDENET driver.

[LREngine]

Setting	Typical Value	Purpose
System=	P:\Builds\BDEV_WF\output	The directory location of the List-Retrieval Engine, a database used to manage access to XML repository files.

Understanding Server jde.ini Settings for WebSphere

This section details the settings found in the ERP 8.0 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)*

See Also

- OneWorld® Java Server Installation Guide*
- OneWorld® Interoperability Guide*
- XPIe Foundation Installation and Configuration Guide*
- OneWorld® Enterprise Workflow Guide*

[JDENET]

Setting	Typical Value	Purpose
maxKernelRanges= 13		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=	mqadapt.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=	1	The maximum number of kernel processes that can be run on this server for each kernel type.
numberOfAutoStartProcesses=	1	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.
NCProductQtyCode=	JDE.IC.F41021Z1	Used with create header. Net commerce product quantity update code.
OWHostName=		ERP 8.0 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 ERP 8.0 is installed.

Understanding Java Server jas.ini Settings

To configure the jas.ini file you must modify several areas before the ERP 8.0 Java Server can run ERP 8.0 Java and HTML applications. If the ERP 8.0 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 ERP 8.0 Java Server:

Setting	Description
---------	-------------

[OWWEB]	ERP 8.0 Java Server specific settings. Modify for your environment.
[CACHE]	HTTP session settings
[DB 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 ERP 8.0 Object Configuration Manager (OCM).
[JDBC DRIVERS]	Specifies the JDBC drivers for each database management system. Modify for your environment.
[SERVER COMPONENTS]	Loads ERP 8.0 Java Server packages. Do not modify this section.
[JDENET]	Specifies values for the ERP 8.0 Java Server to communicate with the ERP 8.0 Enterprise Server.
[SERVER]	Specifies values for the ERP 8.0 Java Server to retrieve data dictionary error descriptions from the ERP 8.0 Enterprise Server.
[LOGS]	Turns on debug logging and specifies the location of log files.
[DB SYSTEM SETTINGS]	Contains startup values for the ERP 8.0 Java Server. Modify for your environment.
[SECURITY]	Contains ERP 8.0 security information.
[PORTAL CONFIGURATION]	Contains optional settings for the ActivEra Portal.

See Also

- *OneWorld® Java Server Installation Guide*
- *OneWorld® Interoperability Guide*
- *XPIe Foundation Installation and Configuration Guide*
- *OneWorld® Enterprise Workflow Guide*

[OWWEB]

Parameter	Recommended Setting	Description
PathCodes=	('JD7334','DV7334','PY7334','PD7334')	This must be a valid path code for ERP 8.0. The default environment is listed by path code. If this value is empty, all available environments will be available to a particular user or group. Each path code is single quoted and separated by commas.
MO QUEUE=	x:\JDEdwardsOneWorld\B7334\internet\jdewww\moqueue	Specifies the path used by the web server to cache the media object files. These are the actual files that are used by web browser. This path must translate into virtual path '/jde/moqueue/' for the web browser. The web server process must have write and create authority to this path.
F0005Prefix=	DR	Column prefix for F0005 table.
F0004Prefix=	DT	Column prefix for F0004 table
OracleTNS= (Windows and UNIX® only)	Site-dependent path	Specifies the location of your Oracle tnsnames.ora file. This entry can be left blank if you are not using Oracle. The default value is: D:\Oracle\Ora81\network\ADMIN\tnsnames.ora
MssqlTNS=	Site-dependent path	Specifies the location of the tnsnames.sql file that must be manually created if you are using Microsoft SQL Server. This entry can be left blank if you are not using Microsoft SQL Server. The default value is: x:\JDEdwardsOneWorld\B7334\internet\jas\tnsnames.sql
MaxUser=	100	The maximum number of ERP 8.0 (internet) users.
FtpPort=	21	If using FTP to retrieve media objects, this is the port number that the FTP service is listening on.
FtpUsr=	Anonymous	If using FTP to retrieve media objects, this is the user ID used to connect to the FTP server.
FtpPwd=	Anonymous	If using FTP to retrieve media objects, this is the password to connect to the FTP server.
UseProxyServer=	FALSE	Defines whether the ERP 8.0 Java Server uses ProxyServer functionality. Valid values are: FALSE This value sends JDENET messages directly from the ERP 8.0 JAS Server and does not employ any proxy server functionality. TRUE This value sends JDENET messages through the JOWProxy process of the ERP 8.0 Client. This value is not valid for ERP 8.0.
UseMOWinNTShare =	TRUE (Windows) FALSE (iSeries)	Specifies the sharing method that the web server uses to fetch the media object files from their

Parameter	Recommended Setting	Description
	and UNIX®)	location into the cached location of the web server. TRUE This value specifies the Windows UNC share. FALSE This value specifies an FTP server.
PrintImmediate=	FALSE	When set to FALSE, the enterprise server generates a PDF file is only. When set to TRUE, the enterprise server generates a PDF file and converts the PDF file to PostScript. PDL or Line output for the UBE job.
KeepUBE=	TRUE	When set to FALSE, the JDE.LOG and JDEDEBUG.LOG files are deleted when the UBE job is completed. When set to TRUE, the JDE.LOG and JDEDEBUG.LOG are kept when the UBE job is completed.
UBEQueue=	QB7334	The batch queue to which UBE jobs are submitted.
VirtualClientTime Out	30000	The time in milliseconds before a Virtual Client is timed out.
SystemDateFormat=	MDE	Specifies the system data format.
SystemDateSeparator=	/	Specifies the system data separator.
HelpPath=	/jde/owhelp/	This setting specifies the directory path for the help files. The syntax of the setting is: <code>http://[machine]/[path]/</code> If you do not specify a setting for HelpPath or use the default setting, /jde/owhelp/, the ERP 8.0 Java Server builds a help path based on the current instance of the JAS server. For example, if the URL for the ERP 8.0 Java Server is: <code>http://machinename:82/</code> Then the ERP 8.0 Java Server assumes the URL for the help path is: <code>http://machinename:82/jde/owhelp</code>
OWJRNL=	OWJRNL	This setting is only applicable to ERP 8.0 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 ERP 8.0 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 name on the AS/400 for the STRJOURNAL stored procedure.
AutoPilotIDs=	FALSE	This setting controls whether the Java Server generates IDs useful for scripting HTML client actions using the J.D. Edwards Auto Pilot tool. Valid values are: FALSE The Java Server does not generate any Auto Pilot IDs. TRUE The Java Server generates Auto Pilot IDs.

Parameter	Recommended Setting	Description
AnonAccess=	TRUE	Enable anonymous user access
DefaultEnvironment=	Site-dependent variable	Default environment for login. Used in conjunction with Basic Authentication.
InitialLanguageCode=	EN	ISO language code for initial user language.
LogoutProcessTimeout=	90	Number of seconds after logout that a business function activated by the user will continue to run.

[CACHE]

Note that the values specified for these keys are in milliseconds. For example, 60000ms is equal to one minute.

Parameter	Recommended Setting	Description
UserSession=	2400000	The time in milliseconds before an inactive user session cache will be cleaned up.
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 value.
Connection=	1800000	The time in milliseconds before an inactive connection cache will be cleaned up.
Security=	14400000	The time in milliseconds before an inactive security cache will be cleaned up. J.D. Edwards recommends using the default value.
UDCInfo=	1200000	The time in milliseconds before an inactive UDCInfo cache will be cleaned up. J.D. Edwards recommends

Parameter	Recommended Setting	Description
		using the default value.
CacheCheck=	60000	The time in milliseconds to check cache. J.D. Edwards recommends using the default value.
Menu=	360000	The time in milliseconds to check the menu.

[DB CONNECTION POOL]

Parameter	Recommended Setting	Description
MaxConnection=	150	The maximum number of connections to a data source. Connection requests 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 many 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.
CleanPoolInterval =	300000	<p>Specifies how often the pool cleaner is set to clean data sources that have a validation string. Note that the values specified for these keys are in milliseconds. For example, 60000ms is equal to one minute.</p> <p>The validation string is in the form:</p> <p style="padding-left: 40px;">ValidationString_x=<statement></p> <p style="padding-left: 40px;">where x is I, 4, or R for DB2/400 S for SQL Server O for Oracle</p> <p style="padding-left: 40px;">and statement is a SQL statement that any user can execute.</p> <p>For example:</p> <p style="padding-left: 40px;">ValidationString_I=Select * from QSYS2.SYSCOLUMNS WHERE 1=2</p> <p style="padding-left: 40px;">ValidationString_S=Select @@connections</p> <p style="padding-left: 40px;">ValidationString_O=Select sysdate from dual</p>

[JDBC URL]

This section allows you to override the OCM mappings for F989998 and F989999. In most cases, you will not use this section of the jas.ini unless you perform Direct Generation of serialized objects directly to a database instead of going through the web server. For Direct Generation, see the example below the parameter settings.

Parameter	Recommended Setting	Description
DEFAULT=	Site-dependent	Defines the JDBC URL override information for the F989999 and F989998 (Java Persistent Object) tables for a particular ERP 8.0 environment. See the syntax description below.
"Environment Name"=	Site-dependent	Defines the JDBC URL override information for the F989999 and F989998 (Java Persistent Object) tables for a particular ERP 8.0 environment. See the syntax description below.

The syntax for the values in the [JDBC URL] section is:

```
<environment name>=<jdbc url>|<jdbc url type>|<owner>|<userid>|<password>
```

The logic flows in this manner:

- attempt to match the given environment name
- if found, then return the jdbc url information
- if not, try to match the DEFAULT as environment name
- if found, then return the jdbc url information
- if not, then the OCM is used

Valid values for <jdbc url> are:

- For a **JDBC-ODBC Bridge**:

```
jdbc:odbc:<odbc datasource name>
```

- For an **Oracle Thin Drive**:

```
jdbc:oracle:thin:@<host>:<port>:<database>
```

- For an **AS/400®**:

```
jdbc:as400://<host><;translate binary=true;prefetch=false>
```

- For a **Microsoft SQL Server 7.0 database**:

`jdbc:ff-microsoft://<host>:<port>/<database>`

- For a **DB2®/UDB database**:

`jdbc:db2:<database>`

where `<database>` is the name or alias of database cataloged by UDB client.

Note: TCP/IP syntax is not valid for DB2 JDBC driver.

Valid values for `<jdbc url type>` are:

- O Oracle
- A Access
- S Microsoft SQL Server
- I, 4, or R iSeries
- W DB2 UDB

The `<owner>` value specifies the owner of the database to which the JDBC URL will connect. This parameter is required for types O, S, and W.

Values for `<userid>` and `<password>` are the database connection user login id and password.

Tips and Techniques

If you don't provide a JDBC URL in this section, ERP 8.0 Java Server will use the database that is configured by ERP 8.0 OCM.

Below are valid settings for the [JDBC URL] section that you can enter to override the OCM mappings. Note that each setting is valid for a different database. Using these examples, create settings that are valid for your database:

For AS/400®:

`DEFAULT=jdbc:as400://server|I|JDE|JDE`

for Oracle

`JPY7334=jdbc:oracle:thin:@server:1521:orcl|O|SYS7334|web7334|web7334`

For SQL 7

`JPD7334=jdbc:ff-microsoft://server:1433/PROD|S|SYSB733|JDE|JDE`

For DB2®/UDB

`DEFAULT=jdbc:db2:JDE7334|W|PD7334|PD7334|PD7334`

The following settings are an example of a configuration that allows Direct Generation of serialized objects to an Oracle database:

```
JDV7334=jdbc:oracle:thin:@server:1521:instance|O|DV7334|jde|jde  
JPY7334=jdbc:oracle:thin:@server:1521:instance|O|PY7334|jde|jde  
JPD7334=jdbc:oracle:thin:@server:1521:instance|O|PD7334|jde|jde
```

The following settings are an example of a configuration that allows Direct Generation of serialized objects to a SQL 7 database:

```
JDV7334=jdbc:ff-  
microsoft://server:1433/JDE_DV7334|S|DV7334|jde|jde  
JPY7334=jdbc:ff-  
microsoft://server:1433/JDE_PY7334|S|PY7334|jde|jde  
JPD7334=jdbc:ff-  
microsoft://server:1433/JDE_PD7334|S|PD7334|jde|jde
```

The following settings are an example of a configuration that allows Direct Generation of serialized objects to an iSeries database:

```
JDV7334=jdbc:as400://server|I|jde|jde  
JPY7334=jdbc:as400://server|I|jde|jde  
JPD7334=jdbc:as400://server|I|jde|jde
```

[JDBC DRIVERS]

These values are used to specify the JDBC drivers used by the ERP 8.0 Java Server to access database types. In previous releases of ERP 8.0, it was not necessary to set Oracle and iSeries drivers because they were defaults for the ERP 8.0 Java Server. However, ERP8.0 does not assume any default drivers in order to avoid JAS classpath exceptions. The ERP 8.0 Java Server will only load the drivers that you specify in this section.

All parameters in this section are commented-out in the shipped jas.ini.template file. You should uncomment the line containing the driver used by your system and applicable to your database.

```
[JDBC DRIVERS]  
;A=sun.jdbc.odbc.JdbcOdbcDriver  
;A=com.ms.jdbc.odbc.JdbcOdbcDriver  
;O=oracle.jdbc.driver.OracleDriver  
;I/R=com.ibm.access.AS400JDBCDriver  
;S=weblogic.jdbc.mssqlserver4.Driver  
;W=COM.ibm.db2.jdbc.app.DB2Driver
```

[SERVER COMPONENTS]

The [SERVER COMPONENTS] section of the jas.ini is used by ERP 8.0 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.JDEORB
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.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. This is a hidden setting.
TempFileDir=	c:\b7\internet (Windows) /tmp (iSeries and UNIX)	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 ERP 8.0 is listening to provide glossary text information for the ERP 8.0 JAS server modify for your environment.
codePage= 1252		The code page for displaying the glossary text information.

[LOGS]

This section is used to set system-dependent value for various logging functions related to the ERP 8.0 Java Server.

Parameter	Recommended Setting	Description
Debug= FALSE		TRUE Debug logging is enabled. FALSE Debug logging is disabled.
Log= Site dependent variable		The name and location of the jas.log file. The directory included in the path must exist on your system.
Debuglog= Site dependent variable		The name and location of the jasdebug.log file. The directory included in the path must exist on your system.
JdbcTrace= FALSE		TRUE Trace logging of JDBC statements are included in the standard output log file. FALSE No trace logging is performed.
stderr= Site dependent variable		Specifies the WebSphere log directory for input errors. The stderr and stdout keys must point to the same directory that was supplied for the stderr and stdout fields when defining the WebSphere Application Server. This is usually the directory under B7334. The default path is: iSeries: /JDEdwardsOneWorld/B7334/stderr.log Windows: c:\WebSphere\AppServer\logs\stderr.log Unix: /u01/JDEdwardsOneWorld/B7334/stderr.log
stdout= Site dependent variable		Specifies the WebSphere log directory for output errors. The stderr and stdout keys must point to the same directory that was supplied for the stderr and stdout fields when defining the WebSphere Application Server. This is usually the directory under B7334. The default path is: iSeries: /JDEdwardsOneWorld/B7334/stdout.log Windows: c:\WebSphere\AppServer\logs\stdout.log Unix: /u01/JDEdwardsOneWorld/B7334/stdout.log

[SECURITY]

Confirm the following settings for the [security] section. These settings are unique to the JAS security server.

Parameter	Recommended Setting	Description
DefaultEnvironment=	JPD7334	Specifies the default ERP 8.0 environment.
NumServers=	1	Specifies the total number of ERP 8.0 security servers that are defined as being available to users who sign on to this ERP 8.0 Java Server. If this parameter is missing or has a value of blank, the default value is 1 and the sign n is handled by the primary security server defined by the SecurityServer= parameter in the [SECURITY] section of the jas.ini
SecurityServer=	Site-dependent variable	Specifies the name of the security server defined for your ERP 8.0 Enterprise Server installation.
SecurityServer <i>N</i> =	Site-dependent variable	Specifies the name of the secondary server. You can define multiple security servers if you want sign on to fail over to valid secondary servers if users cannot sign on to the primary server. Valid values for <i>N</i> are numeric values from 1 to n where: 1 Defines the first secondary security server. 2 Defines the second secondary security server. n Defines any number of sequentially accessed security servers.
UserLogonCookie=	FALSE	Defines whether user sign on information is saved in an encrypted cookie on the HTML client machine. This information includes user name, password, and environment. Valid values are: TRUE User information is saved in an encrypted cookie that automatically populates the login screen. DIRECT Enables users to access login information in the cookie and bypass the login screen. FALSE User information is not saved in an encrypted cookie. You must use this setting when using the JAS Redirector.
CookieLifeTime unit is	"day"	Specifies the unit of time used by the CookieLifeTime= parameter.
CookieLifeTime=	7	Specifies the amount of time before a cookie expires, measured by the value of the CookieLifeTime unit is parameter.

[DB SYSTEM SETTINGS]

Confirm the following settings in this section. You can copy this section from a valid jde.ini file on a ERP 8.0 client workstation.

Parameter	Recommended Setting	Description										
Default User=	JDE	The default user for accessing the OCM tables. This must be correct in order to start JAS.										
Default Env=	JPD7334	The default environment for accessing the OCM tables. This is essentially a WAN environment where all possible logic is mapped to execute on the Enterprise Server.										
Base Datasource=	System - B7334	The ERP 8.0 datasource that contains the ERP 8.0 bootstrap tables (F98611 and F986101).										
Object Owner=	SYS7334 (Oracle and SQL) SY7334 (DB2®/UDB) Leave blank for iSeries DB2	This key is required for Oracle, SQL Server, and DB2/UDB. The key specifies the owner in the database where the server map OCM tables reside.										
Server=	Site-dependent variable	Enter the name of the server where the OCM tables exist.										
Database=	Site-dependent variable	This purpose of this key is to point to the location where the server map OCM tables are located. This key value depends on the database in use. When using Oracle, set the value to a valid Oracle connection string. When using either SQL Server or DB2, set the value to "System - B7334" (without the quotes).										
Type=	Site-dependent variable	This key value depends on the database in use. Valid values are: <table style="margin-left: 20px;"> <tr><td>O</td><td>Oracle</td></tr> <tr><td>A</td><td>Microsoft Access</td></tr> <tr><td>S</td><td>Microsoft SQL Server</td></tr> <tr><td>I, 4 or R</td><td>iSeries</td></tr> <tr><td>W</td><td>DB2/UDB</td></tr> </table>	O	Oracle	A	Microsoft Access	S	Microsoft SQL Server	I, 4 or R	iSeries	W	DB2/UDB
O	Oracle											
A	Microsoft Access											
S	Microsoft SQL Server											
I, 4 or R	iSeries											
W	DB2/UDB											
Decimal Shift=	Y	The decimal shift specifies whether the system shifts the decimal placement of amount values before storing to or after reading from the database.										
Julian Dates=	Y	The Julian dates specify whether the system shifts the decimal placement of amount values before storing to or after reading from the database.										
Use Owner=	Y (N for iSeries DB2)	The use owner specifies whether the system only allows access to the OCM tables by the object owner.										
Secured=	Y	Indicates whether or not this is a secured database requiring a user and password login.										
Library=	SYSB733	AS/400 only. This setting specifies the database library holding the system tables.										

Parameter	Recommended Setting	Description
		The actual value for this setting is site dependent and relies on the OCM location. If this setting is omitted, the AS/400 searches the default path for Table, disregarding the Library (database owner for Oracle). The result is that an incorrect OCM record is found.

[PORTALCONFIGURATION]

This section contains optional settings for the ERP 8.0 Portal.

If you are using a load balancer such as a Cisco LocalDirector, you must specify the *localhost* setting.

If you are using the Portal Component Importer, you must specify the *backup*, *jde*, and *servlet* settings.

With the exception of the above settings, all of 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 wishing 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 an upgrade.

Parameter	Recommended Setting	Description
admin (for SP 13.1 and above)	Site dependent variable; no default value is used.	This setting specifies a list of user IDs separated by the character. These users can administer all components and workspaces – regardless of relationship.
backup	Windows: C:\JDEdwardsOneWorld\B7334\Internet\backup iSeries and Unix: /JDEdwardsOneWorld/B7334/Internet/backup	A location where files that are about to be overwritten by the Component Importer are saved. This provides a backup of the overwritten files.
cache_workspace_purge	3600000	The time in milliseconds to retain a workspace in cache without being accessed before being deleted. If set to zero, the system never purges workspaces from the cache. Changing this value can drastically affect portal performance. You should use caution when changing this value.

Parameter	Recommended Setting	Description
cache_workspace_expire	900000	<p>For expirable components, the time in milliseconds in addition to the last loaded timestamp before a workspace is deleted. To make a component expirable, implement public long <code>getLastLoadedTimestamp()</code>. A workspace does not expire unless a user accesses it. If set to zero, the system never expires workspaces from the cache</p> <p>Changing this value can drastically affect portal performance. You should use caution when changing this value.</p>
cache_workspace_timeout	300000	<p>The interval in milliseconds the system should wait before checking cache for items to purge or expire. The lower the number, the better the memory conservation, but the slower the cache. If set to zero, the system never expires or purges workspaces from the cache.</p> <p>Changing this value can drastically affect portal performance. You should use caution when changing this value.</p>
cache_workspace_refresh	0	<p>The time in milliseconds before the system deletes all workspaces from the cache.</p> <p>Changing this value can drastically affect portal performance. You should use caution when changing this value.</p>
cache_component_purge	3600000	<p>The time in milliseconds to retain a component in cache without being accessed before being deleted. If set to zero, the system never purges components from the cache.</p> <p>Changing this value can drastically affect portal performance. You should use caution when changing this value.</p>
cache_component_expire	900000	<p>For expirable components, the time in milliseconds in addition to the last loaded timestamp before a component is deleted. To make a component expirable, implement public long <code>getLastLoadedTimestamp()</code>. A component does not expire unless a user accesses it. If set to zero, the system never expires components from the cache.</p> <p>Changing this value can drastically affect portal performance. You should use caution when changing this value.</p>
cache_component_timeout	300000	<p>The interval in milliseconds the system should wait before checking cache for items to purge or expire. The lower the number, the better the memory conservation, but the slower the cache. If set to zero, the system never expires or purges components from</p>

Parameter	Recommended Setting	Description
		the cache. Changing this value can drastically affect portal performance. You should use caution when changing this value.
cache_component_refresh	0	The time in milliseconds before the system deletes all components from the cache. Changing this value can drastically affect portal performance. You should use caution when changing this value.
cache_itrust_purge	60000	The time in milliseconds to retain an inherited trust session in cache without being accessed before being deleted. If set to zero, the system never expires or purges inherited trust session from the cache. Changing this value can drastically affect portal performance and security. You should use caution when changing this value.
cache_itrust_expire	0	For expirable components, the time in milliseconds in addition to the last loaded timestamp before an inherited trust session is deleted. To make a component expirable, implement public long getLastLoadedTimestamp();. An inherited trust session does not expire unless a user accesses it. You should not change this setting unless instructed to do so by J.D. Edwards
cache_itrust_timeout=	30000	The interval in milliseconds the system should wait before checking cache for items to purge or expire. The lower the number, the better the memory conservation, but the slower the cache. If set to zero, the system never expires or purges inherited trust sessions from the cache.
cache_itrust_refresh	0	The time in milliseconds before the system deletes all inherited trust sessions from the cache.
cache_entbutton_purge	3600000	The time in milliseconds to retain an Enterprise Navigation Bar button in cache without being accessed before being deleted. If set to zero, the system never purges enterprise navigation buttons from the cache. Changing this value can drastically affect portal performance. You should use caution when changing this value
cache_entbutton_expire	0	For expirable components, the time in milliseconds in addition to the last loaded timestamp before an Enterprise Navigation Bar button is deleted. To make a component expirable, implement public long

Parameter	Recommended Setting	Description
		getLastLoadedTimestamp(); If set to zero, the system never expires enterprise navigation buttons from the cache. If set to zero, the system never expires enterprise navigation buttons from the cache.
cache_entbutton_timeout	900000	The interval in milliseconds the system should wait before checking cache for items to purge or expire. The lower the number, the better the memory conservation, but the slower the cache. If set to zero, the system never expires or purges Enterprise Navigation Bar buttons from the cache.
cache_entbutton_refresh	0	The time in milliseconds before the system deletes all Enterprise Navigation Bar buttons from the cache.
pagegreeting	Welcome to your Portal	Default page greeting when adding a new workspace. This setting has a blank default value.
localhost	Site dependent variable	If you are using a Cisco LocalDirector router, you must include this setting. If the port of your web server is other than 80, you must specify the port. The syntax is: <i>ip_address:port</i> , where <i>ip_address:port</i> refers to the local ERP 8.0 Java Server machine (not the Cisco LocalDirector machine). This is required to enable the portal code to determine the origin of machine requests so responses can be routed accordingly. For example: 10.0.110.79:85
styleurl	/jde/owportal/portal.css	URI of portal style sheet Both relative and fully qualified URLs are valid.
hlpimg	/jde/owportal/images/ help2.gif	Name of help image in component tool bar Both relative and fully qualified URLs are valid.
perimg	/jde/owportal/images/ edit2.gif	Default personalize icon file path and name such as: /jde/images/edit2.gif. Both relative and fully qualified URLs are valid.
maximg	/jde/owportal/images/ maximize2.gif	Default expand icon file path and name such as: /jde/images/maximize2.gif. Both relative and fully qualified URLs are valid.
minimg	/jde/owportal/images/ minimize2.gif	Default contract icon file path and name such as: /jde/images/minimize2.gif Both relative and fully qualified URLs are valid.
resimg	/jde/owportal/images/ restore2.gif.	Default restore icon file path and name such as: /jde/images/restore2.gif. Both relative and fully qualified URLs are valid.

Parameter	Recommended Setting	Description
retimg	/jde/owportal/images/ return.gif.	Default return icon file path and name such as: /jde/images/return.gif. Both relative and fully qualified URLs are valid.
servlet	C:\JDEdwardsOneWorld\b7334\internet\jas (windows) /JDEdwardsOneWorld/B7334/jas (UNIX and iSeries)	The directory where Portal servlets reside. The Component Importer/ Exporter uses the directory to find and write servlets. This is a directory that the JAS administrator must create and configure to be included in the JDE Web Application's classpath.
ShowCurrentEnvironmentRole	FALSE	Environment display. When set to TRUE, the system displays the current environment in the Workspace Navigation bar.
ShowSignin	TRUE	Shows the regular login hyperlink on the Workspace Navigation Bar when the user logs in anonymously.
corplogourl	/jde/owportal/images/jdelogo.gif	The URL of the default corporate logo. This image is used when the current workspace does not specify an image. Both relative and fully qualified URLs are valid.
corplogolinkurl		The URL of the default corporate logo hyperlink. This link is used when the current workspace does not specify a link. This setting has no default value. Both relative and fully qualified URLs are valid.
DataMigrationHasOccurred	This is a system setting, do not modify this setting or add it the jas.ini file.	True if B9 pristine component and workspace data had been updated.
DefaultWorkspace		The workspace to display when no other workspace is specified or when DefaultWorkspaceOnly is set to TRUE. Use upper case letters to set this parameter. This setting has no default value.
DefaultWorkspaceOnly	FALSE	Allows access to the default workspace only.
edtimg	/jde/owportal/images/ edit2.gif	The URL of the default edit icon. The edit icon is used for buttons that allow the user to alter an object. Both relative and fully qualified URLs are valid.
jde	C:\JDEdwardsOneWorld\b7334\internet\jdewww (Windows) JDEdwardsOneWorld/B7334/jdewww (UNIX® and iSeries)	The jdewww directory created at JAS install time. The Component Importer/Exporter uses the directory to find and write HTML resources such as .html, .gif, and jpg files.
NumberOfIcons	34	Number of enterprise navigation bar icons override.
colorscheme1	Default #FFFFFF #00009C #0063CE #080029	Delimited String for color schemes. String consists of name, background color, tool bar

Parameter	Recommended Setting	Description
	#CECECE #FFFFFF #636363 #FFFFFF background.jpg /jde/owportal/owportal.css	color, tool bar tools color, fixed area color, border color, text color, menu color, greeting color, top background image color, style sheet 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, tool bar tools color, fixed area color, border color, text color, menu color, greeting color, top background image color, style sheet 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, tool bar tools color, fixed area color, border color, text color, menu color, greeting color, top background image color, style sheet URL.
colorscheme4	Techno #FFFFFF #006363 #739C9C #004242 #CECECE #FFFFFF #B5C6C6 #FFFFFF technobkgd.gif /jde/owportal/portal.css	Delimited String for color schemes. String consists of name, background color, toolbar color, tool bar tools color, fixed area color, border color, text color, menu color, greeting color, top background image color, style sheet URL.
colorscheme5	Cityscape #FFFFFF #FF9C00 #FFC66B #000063 #CECECE #FFFFFF #636363 #FFFFFF cityscapebkgd.gif /jde/owportal/portal.css	Delimited String for color schemes. String consists of name, background color, toolbar color, tool bar tools color, fixed area color, border color, text color, menu color, greeting color, top background image color, style sheet URL.