

## Unit 4: SYSTEM HEALTH

## Unit objectives

- Describe the system troubleshooter
- Explain about monitoring and using diagnostic tools to troubleshoot
- Discuss about maintenance and cleanup the processes
- Create scheduled report
- Describe about HealthCheck utility and usage of scripts

# Lesson 1

## Troubleshooter

## Lesson objectives

- View Database Usage, Services, and Pools
- View business process Queue, Usage statistics, and State information
- Resume, restart, or terminate a business process
- View system classpath and JNDI tree information
- View the cleanup process
- View environment statistics, including cache and memory used
- View Remote Perimeter Server information if present
- View Troubleshooter information about Sterling B2B Integrator cluster nodes
- Monitor node information and threads with Cluster Monitor

## Troubleshooter

The Troubleshooter tool is a graphical utility for monitoring system operation and diagnosing Sterling B2B Integrator system problems.

Troubleshooter allows you to view system information on different nodes in a clustered environment, including DB usage and services, business process queue and usage information, and environment statistics

## Accessing the System Troubleshooter

To access the System Troubleshooter menu:

Navigate to the Administration menu, select Operations > System > Troubleshooter

# Troubleshooting - System Status

The System Status area displays the following information:

Option	Description
Select Node	Desired cluster node to display
Start time	The date and time the system was last started or restarted
Uptime	The amount of time the system has been running since the last start or restart
Refresh Status	Refreshes active controllers
Stop the System	Stops Sterling B2B Integrator using the softstop script.
Business Process Queue Usage	Displays business process queue usage statistics
Business Process Usage	Displays business process usage statistics
Classpath Information	Displays the Sterling B2B Integrator classpath

## Troubleshooting - System Status

(contd..)

- **Refresh Status** - System status information is collected and reported in real time. To view the most current system status, click Refresh Status
- **Stop the System** - Stops the system using the softstop script allowing business processes to complete before stopping the system. After 5 minutes, hardstop will run. The UI will shutdown immediately.
- **Database Usage** - The top of the Database Usage page shows the Database Access Test statistics and Database Capacity statistics.

# Troubleshooting - System Status

(contd..)

The Database Usage page includes information about the:

- Database Access Test
  - Average Insert Time
  - Number Inserts
  - Insert Size
- Database Capacity
  - Database MB Usage
  - Database Services
  - Environmental Pool Usage

## Business Process Queue Usage

The Business Process Queue Usage page enables you to diagnose problems with business process queues.

The Business Process Queue Usage page includes information about:

- Cache Usage
- Queue Statistics

## Business Process Queue Usage

(contd..)

The Business Process Queue Usage allows to determine:

- Number of business processes within the data size ranges that have been processed.
- Number of business processes that ran without being cached and the number that are currently in cache.
- Cache location so that you can determine the number of business processes that were found in the Soft Reference Cache, Memory Cache, and Disk Cache.

## Halted or Interrupted Business Process

- A business process in a Halting, Halted, Interrupted\_Man, or Interrupted\_Auto state requires immediate attention because the business process has stopped processing.
- In Sterling B2B Integrator, business processes remain in a halted or interrupted state until some action is taken on the business process.
- When you notice a halted or interrupted business process, you have two options:
  - Terminate the business process.
  - Restart the business process.

## Waiting Business Process

- A business process in a waiting state may not require immediate attention; the business process may be waiting on a resource or a document from another business process before completing.
- When you notice a business process in a waiting state, you have three options:
  - Allow the business process to remain in the waiting state if it is waiting on resources or a service or activity that is disabled, but will be enabled
  - Terminate the business process
  - Restart the business process

## Determining the Causes

To determine the cause of an increasing number of business processes in a halting, halted, waiting, or interrupted state, review:

- The Business Process Usage report on the Operations > System > Troubleshooting page.
- Appropriate system and business process schedules to verify that they are turned on.
- The PS Report for information related to the business process execution times.

## Determining the Causes

(contd..)

- View the system classpath for debugging purposes and to verify whether third-party libraries are available in the classpath.
- View the system JNDI Tree for debugging purposes and verify the expected resources.

## Application Status

The Application Status area of the System Troubleshooter page displays the current operational status of a Sterling B2B Integrator process environment.

## Cache Usage Page

The Cache Usage page includes the following information:

Field Name	Description
Cache name	Name of the cache
Count	Number of objects in the cache
Requests	Number of times an object was requested from the cache, regardless of success
Hits	Number of times an object was requested from the cache and found

## Resolutions for Inefficient Use of Cache

The following resolutions are for the inefficient use of cache:

- Improperly tuned cache performance properties
- High cache allocation for less frequently used large objects
- Low cache allocation for more frequently used small objects

## Application Status - Threads

To view threads in Sterling B2B Integrator, in the Application Status area, click Threads.

Threads					
Stop	State	ID	Type	Priority	Registered
	Active	<a href="#">10181 [fs_3_1_whitepaper]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:00
	Active	<a href="#">10183 [DeenvelopeX12]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:02
	Active	<a href="#">10193 [DeenvelopeX12]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:03
	Active	<a href="#">10194 [DeenvelopeX12]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:02
	Active	<a href="#">10196 [DeenvelopeX12]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:02
	Active	<a href="#">10197 [DeenvelopeX12]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:03
	Active	<a href="#">10201 [fs_3_1_whitepaper]</a>	Harness	Queue:4 Priority:0	2/20/2006 17:06:03
	Active	FileSystem_node11140473160919 [FileSystem_node1]	RMI	5	2/20/2006 17:06:00
	Active	<a href="#">10195 [phaethon:856d6e1:10988e89664:4300]</a>	Business Process	Queue:4 Priority:0	2/20/2006 17:06:02

## Refreshing a Controller

User can refresh controllers running in the environment using the System Troubleshooting page.

To refresh a controller, in the Application Status area:

Click the refresh icon in the Refresh column.

# Controlling Adapters

Adapters can be enabled or disabled using Troubleshooter.

Clicking the adapter name will display its service settings, characteristics, and status.

**Application Status**

Host: phaethon  
Location: /opt/gis/node1/noapp  
State: Active   Memory in use: 1779709 KB   Active threads: 0  
[\[Cache Usage\]](#) [\[Threads\]](#)

**Controllers:**

Refresh	State	Name
	Active	Adapter Server
	Active	Resource Monitor Server
	Active	Scheduling Server

**Adapters:** 59 active / 7 stopped  
21-30 of 66

Page: ◁ 1 2 3 4 5 6 7 ▷

On/Off	State	Name	Type
<input checked="" type="checkbox"/>	Enabled	fs_3_1_whitepaper	File System Adapter
<input checked="" type="checkbox"/>	Enabled	FS_InstallValidation	File System Adapter
<input checked="" type="checkbox"/>	Enabled	ES_WriteEDI	File System Adapter
<input checked="" type="checkbox"/>	Enabled	FTP_Client_Adapter	FTP Client Adapter
<input checked="" type="checkbox"/>	Enabled	FTP_Send_To_GIS_Support	FTP Send Adapter
<input type="checkbox"/>	Stopped	FTP_Server_Adapter	FTP Server Adapter
<input checked="" type="checkbox"/>	Enabled	FTPSend	FTP Send Adapter
<input checked="" type="checkbox"/>	Enabled	GIS_Support_Upload_File_System_Collector	File System Adapter
<input checked="" type="checkbox"/>	Enabled	HTTP_Client_Adapter	HTTP Client Adapter
<input checked="" type="checkbox"/>	Enabled	HTTP_Communications_Adapter	HTTP Communications Adapter

## Databases Services

In Sterling B2B Integrator, the database is installed on this server, the Database Services area displays the following information:

- Host - Name of the host on which a database resides
- Location - Location or path of the database installation
- State - State of the database, either Active or Inactive

## RMIAPrime Services

The RMIAPrime Services area displays the following information:

- Host - Name of the host
- Location - Location or path to the RMIAPrime Service
- State - State of the RMIAPrime Service, either Active or Inactive

## Monitoring Cluster Node Status

To view node status information navigate to:

- The Administration menu, select Operations > System > Cluster > Node Status.

# Monitoring Cluster Node Status

(contd..)

The following table describes the Node Status page:

Column	Description
Name	Shows the name of the node. Click the name to view more details about the node.
URL	Shows the uniform resource locator for the node.
Troubleshooter	Provides a link to the System Troubleshooter.
Token Node	States whether this is the token node. Valid values include: True – This is the token node. False – This is not the token node.
Creation Time	Shows the date and time that the node was created.
Status	Shows the status of the node. Valid values include: Active – Node is working and available for processing Starting Ops – Node is starting up, but not available for processing Node went down – Node is not working and not available for processing

# Monitoring Cluster Node Status

(contd..)

Click the Name of the node to view the following detailed information:

Column	Description
Location	Shows the directory path where the node is installed.
Role	States the role of the node.
Operation Controller Host	Shows the name of the server acting as the Operation Controller Host.
Operation Controller Port	Shows the port number for the Operation Controller.
Sterling B2B Integrator version	Shows which version of Sterling B2B Integrator is used for the node.
JVM Version	Shows the version number for the java virtual machine.
JVM Vendor	Shows the vendor that provided the java virtual machine.



## Exercise

### 1. Pool Connections

## Completed lesson objectives

- View Database Usage, Services, and Pools
- View business process Queue, Usage statistics, and State information
- Resume, restart, or terminate a business process
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## Questions



# Lesson 2

## Monitoring and Diagnostic Tools

## Lesson objectives

- Identify the most commonly used System Logs and their contents
- Identify the most commonly used System Reports
- Explain about Message Monitor to check messages

## System Logs

Sterling B2B Integrator has many components, including software applications, Web servers, and database servers. To monitor the activities of each component, Sterling B2B Integrator generates log files.

Log files are created in the **install\_dir/logs** directory.

## Viewing Log File Contents

To view current log file contents in Sterling B2B Integrator:

1. From the Administration menu, select Operations > System > Logs.
2. Select the appropriate log file. The log opens.

## Analyzing Log File Contents

The contents of a log file can provide information about system activities and problems.

The format for entries written to a log file is:

***YYYY-MM-DD HH:MM:SS.ss loglevel 'message code'***  
***Scope.Subsystem.Name 'information string'.***

- YYYY-MM-DD is the date in year, month, day format.
- HH:MM:SS.ss is the time in hour, minutes, seconds format.

# Analyzing Log File Contents

(contd..)

- Loglevel is the condition used to determine the type of information written to the log. The log level conditions are:
  - ERROR – Collects only error conditions.
  - INFO – Collects additional information.
  - TIMING – Collects timing information.
  - DEBUG – Collects detailed information about data flow.
  - ALL – Collects information for all of the above conditions.

# Analyzing Log File Contents

(contd..)

- Message code describes the activity or problem, using the following format:
  - The first four digits specify the scope (like Workflow, Ops, Util). The next digit specifies the log severity level (default conventions use 1 for error/exception, 2 for Debug messages, 3 for Warnings, and 4 for info/All messages). The next three digits specify the subsystem (like Workflow Queue or Workflow Engine). The last four digits specify the error number.

## Analyzing Log File Contents

(contd..)

- Scope.Subsystem.Name is a text description of the affected part of Sterling B2B Integrator (like Workflow, Ops, Util); the Sterling B2B Integrator subsystem (like Workflow Queue or Workflow Engine); and what occurred (Name)
- Information string is a brief description of the activity that occurred.

## Example: Log File Contents

```
[2006-05-30 11:06:55.661] ALL 000440020297  
SERVICES.SERVICES_CONTROLLER.INFO_sdi_getName startup:  
loading HTTP_SEND_ADAPTER
```

# Changing Log Settings

(contd..)

## Changing Log Settings for a Global Log:

- To change the settings for the global log properties, follow the following format for each property:

***logService.Property=Value***

- Example:

***defaultlog.maxnumlogs=15***

Sets the maximum number of the log type specified as the default log (systemlogger by default) to 15.

## Changing Log Settings

(contd..)

### Changing property file settings using the customer override property file:

1. In the install\_dir/properties directory, locate (or create, if necessary) the customer\_overrides.properties file.
2. Open the customer\_overrides.properties file in a text editor.
3. Specify the settings for the global log properties using the following format: logService.=Save and close the customer\_overrides.properties file.
4. Stop and restart Sterling B2B Integrator to use the new values.

# Changing Log Settings

(contd..)

## Changing Log Settings for an Individual Log:

To change log settings for an individual log type:

1. From the Administration menu, select Operations > System > Logs.
2. Click the icon next to the type of log for which you want to change the log settings.
  - Location
  - Rollover Interval
  - Logging Level
3. On the Log Settings page, specify settings for the options.
4. Click Save.

## System Reports

The Sterling B2B Integrator Internal System Reports can be accessed from the Administration window select Operations > Reports > List All.

The following are the Category of Reports:

- |                                     |                         |
|-------------------------------------|-------------------------|
| 1. Admin Audit                      | 7. EDI Reports          |
| 2. Authentication                   | 8. Map Lists            |
| 3. Authorization                    | 9. Traffic              |
| 4. Business Process Definition List | 10. Traffic Summary     |
| 5. Business Process Detail          | 11. Translation Service |
| 6. DB Stats                         | 12. WFFactModelDetail   |

## Message Monitor

- In Sterling B2B Integrator, business processes use messages to communicate with each other.
- Certain business processes create Produce and Consume messages (async communication hand off to the database).
- The Produce business processes produce messages to be consumed.
- The Consume business processes wait for messages from the Produce business processes.

## Considerations - Message Monitor

- Messages that are successfully produced or consumed are not monitored.
- Messages are tied closely to business processes. But messages also have identities separate from business processes.
- Sometimes Produce and Consume business processes have to choose between messages with the same name.
- An unsuccessful message remains in Sterling B2B Integrator until an appropriate Produce or Consume business process step completes the message hand off and uses the message.

## Searching for Unsuccessful Messages

User can search for unsuccessful message using the following search methods:

- Message Name – Display messages whose names contain the specified character or string.
- Start Date From and Start Date To – Display messages for which the related business process step invoked the Produce or Consume activity at the specified start date and time.
- Alphabetically or by message type (ALL, Producer, or Consumer) – Display messages initiated by business processes based on alphabetical list or the default is ALL.

## Completed lesson objectives

- Identify the most commonly used System Logs and their contents
- Identify the most commonly used System Reports
- Explain about Message Monitor to check messages

# Questions



# Lesson 3

# Maintenance and Cleanup

## Lesson objectives

- Use the following maintenance and cleanup services:
  - Index Business Process service
  - Archive Business Process service
  - Export and import business process with Resource Tags
  - Purge the services
  - Purge Business Process Linkage service
  - BPRecovery service

## Archiving and Purging

Archiving the business process data protects the critical data, and also conserves database disk space of Sterling B2B Integrator.

Sterling B2B Integrator uses the following components to move business process data out of the database and onto a persistence level of long-term storage.

- Index Business Process service
- Archive business process service
- Purge business process service

## Index Business Process Service

Indexing facilitates purging and taking backup of business processes. It is also done to extract information from various business processes and documents to make the system run more efficiently.

The Index Business Process Service selects all completed or terminated business process data and business processes for archiving or purging.

## Index Business Process Service

(contd..)

The Index Business Process service creates an entry for each completed or terminated business process in the **WF\_INST\_S** table and updates the following tables:

- WORKFLOW\_CONTEXT
- DOCUMENT
- DOCUMENT\_EXTENSION
- DATA\_TABLE
- CORRELATION\_SET
- WORKFLOW\_LIFESPAN
- DOCUMENT\_LIFESPAN
- WORKFLOW\_DATA

# Configuring the Index Process Service

The following table describes the fields used to configure the Index Business Process service:

Parameter	Description
Name	Unique and meaningful name for the service configuration
Description	Meaningful description for the service configuration, for reference purposes
Run as User	Enter the user ID to associate with this service when run.
Do not use schedule	If field is selected, it does not get scheduled to run.
Run service based on timer	Valid values are the hour and minutes at which to run the service.
Run service daily at	Valid values are the hour and minutes at which to run the service, daily.
Business Process Usage	Valid values are the day of the week, the hour, and the minutes at which to run the service.

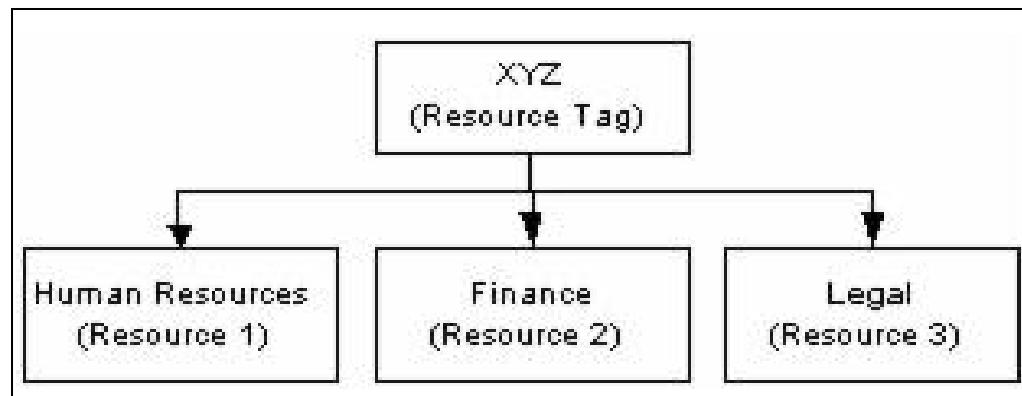
## Key points - Index Process Service

The following are the key points in Index Business Process service:

- The Index Business Process service marks the business process expiration date and stages data to be archived or purged.
- User interface and system performance will suffer.
- Database will eventually run out of disk space.
- If disabled or failing, none of the business processes can be archived or purged. Contact support to resolve.
- May require manual cleanup

## Resource Tags

- A resource tag is a name that you use to identify a group of associated resources.
- A resource tag is much like a company name, with each department being a web resource associated with the resource tag.



## Resource Tags

(contd..)

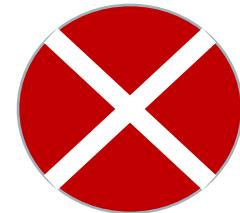
Managing resource tags involves:

- Creating resource tags
- Editing a resource tag to add or delete resources from the tag
- Copying the resource tag to use as the basis for a new tag with a different name
- Deleting obsolete resource tags

## Purge Service

The Purge service looks for eligible records to delete from the Live DBs. It is a preconfigured server and does not require any configuration or third-party files.

The Purge Service runs on a schedule (every ten minutes by default).



## Key Points - Purge Service

1. The service purges data that has already been archived or flagged to be purged.
2. The database size grows and eventually runs out of disk space.
3. The user interface and system performance will suffer.
4. If disabled or failing, none of the business processes can be purged. Contact support to resolve.
5. May require manual cleanup.

## Purge Business Process Linkage Service

The Purge Business Process Linkage service checks all hierarchical data in the WORKFLOW\_LINKAGE table. If all business processes of a hierarchical instance have been archived or purged, then it removes the hierarchical linkage records from the table.

## BPRecovery Service

The BPRecovery service runs at system startup and scheduled intervals.

The level of recovery for the business process are:

- 1. Auto Resume** - Resume the business process at the point at which the business process halts.
- 2. Auto Restart** - Restart the business process from the beginning.
- 3. Terminate** - Terminate the business process.
- 4. Manual** - Requires you to resume or restart the business process manually.

## Key Points - BPRecovery Service

1. The service runs at system startup and scheduled intervals.
2. The service marks business processes active during an abnormal shutdown as interrupted.
3. If the BPRecovery service is not running or failing, then processes stay in Active status and no action can be taken on them (terminate, restart, resume).
4. The processes cannot be archived, so the database size grows and eventually runs out of disk space.
5. If you are having problems with the BPRecovery service, contact support to resolve.
6. May require manual cleanup.



## Exercise

1. View Scheduled Services
2. Archive to an Offline Location
3. Restore Archived Business Process Data Offline
4. Import and Export Using Resource Tags

## Completed lesson objectives

- Use the following maintenance and cleanup services:
  - Index Business Process service
  - Archive Business Process service
  - Export and import business process with Resource Tags
  - Purge the services
  - Purge Business Process Linkage service
  - BPRecovery service

# Questions



# Lesson 4

## Scheduling

## Lesson objectives

- Describe the basic of schedules
- Explain different phases in creating schedules
- Explain the procedure to enable, disable and delete schedules
- Explain the steps to set up schedules for reports and stand-alone services.

## Scheduling Basics

In Sterling B2B Integrator, a schedule is a resource in the database that stores time and date information separately from the activity being scheduled.

Schedules identify when to run an activity and when to skip the normal interval by excluding a certain time, time range, or date.

## Different Phases

The different phases in creating schedules are:

**Phase 1:** Scheduling Prerequisites and Setup in a Test Environment

**Phase 2:** Testing Schedules in a Test Environment

**Phase 3:** Exporting Schedules to the Production Environment

## Scheduling Prerequisites

- Appropriate license file for the services and activities you want to schedule.
- Appropriate security permissions applied to your user account.

# Scheduling Permissions

Parameter	Description
UI BP Manager	Enables you to download the Graphical Process Modeler, and create and manage business processes.
UI Reports	Enables you to create, manage, and schedule reports.
UI Services	Enables you to install, configure, manage, and schedule services.
UI Scheduler	Enables you to schedule business processes, search for schedules and edit business process and service schedules.
UI Import/Export	Enables you to export the schedules and associated business processes, services, or reports to another system of the application, and import the schedules and resources into the application.
UI Logs	Enables you to view the schedule.log and reports.log files for troubleshooting schedules.

## Scheduling Considerations

- Are you scheduling a business process, report, or service?
- If scheduling a business process, does data need to be passed to the business process?
- Who or what business process or service needs the output from the scheduled business process, service, or report?
- Is the business process or service that uses the output also scheduled?
- Are you running the business process, service, or report manually as well as on a schedule?

## Scheduling Considerations

(contd..)

### **Deadlines That Impact Scheduled Times:**

Are there internal and external deadlines that impact when the schedule should be set? Deadlines can determine the dates and times when an activity should be scheduled to run. The examples are:

- Reporting time frames for your company
- Priority or strategy changes of your company
- Trading partner agreements

## Scheduling Considerations

(contd..)

### Dates That Impact Excluded Times:

Are there dates or times when the schedule does not need to run? Holidays and other events can determine the dates and times that a schedule should exclude or that a low priority schedule should include. The examples are:

- Holidays and company calendars
- Periods of higher processing times during the quarter
- Scheduled maintenance of the application or other systems that integrate with the application, either at your company or your trading partners.

## Scheduling Considerations

(contd..)

### Peak and Non-peak Processing Time:

Peak and non-peak processing times can help you determine when to run high priority and low priority activities in the application to increase performance and maximize the use of system resources. The examples are:

- You receive the largest amount of processing requests for the application every day between 8:00 a.m. and 5:00 p.m.
- You receive the least amount of processing requests for the application every day between 2:00 a.m. and 5:00 p.m.

## Scheduling Considerations

(contd..)

### The Processing Time and Frequency of the Scheduled Activity:

The processing time and frequency of the activity being scheduled impacts scheduling intervals. The examples are:

- Total processing time required for the business process, service, or report
- Frequency that the data or processing is required

## Schedules for Report

Setting up schedules for reports will automatically generate reports on hourly, daily, weekly, or monthly intervals.

Consider these guidelines:

- The report configuration must exist before you set up the schedule.
- You can have only one schedule per report configuration.
- After a scheduled report is generated, it can be stored on the file system or e-mailed (in .zip format) to a recipient. You set up these choices as part of the report schedule.

## Schedules for Report

(contd..)

- Creating a schedule for a report automatically creates a business process using the default report name `reportname_scheduleBP`. The business process for a schedule is listed with other business processes when you select Deployment > Schedules > List > Business Processes.
- You can also schedule a report through the Report Service, if the report configuration is predefined and you supply the report configuration name and the format of the report.

## Schedules for Stand-alone Services

User can set up schedules only for those services and adapters that run as a stand-alone service. Creating a schedule for a service is part of creating the service configuration.

Consider these guidelines:

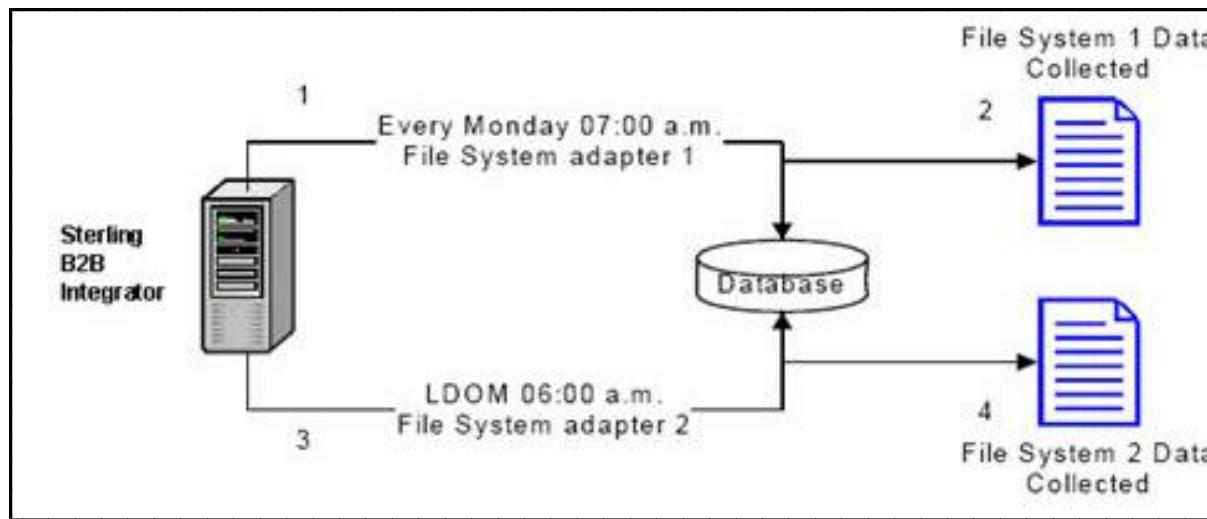
- You cannot create a schedule and apply it to many services at the same time.
- The schedule settings are stored in the database and are internal to the application only. Schedules for applications that are external to the application do not impact the service and adapters schedules that are created within the application.

## Schedules for Stand-alone Services

(contd..)

- Some stand-alone services and adapters are supplied with default schedules when the application is installed.
- The Run as User option is available only to super users. It is not available to subgroups of the Admin group or other groups.

## Example - Stand-alone Service Schedule



This example consists of two scheduling activities:

- Scheduling a File System adapter one day each week at a specific time. (Weekly schedule)
- Scheduling a Gentran:Server Windows adapter one day a month at a specific time. (Monthly schedule)

## Default Schedules

Some services and adapters are supplied with default schedules when the application is installed. You can edit the default schedules to meet your needs.

For example:

Service or Adapter Supplied	Default Schedule Settings
<b>AFTPurgeArchiveMailboxes</b>  Ensures that messages stored in AFT's archive mailboxes are made eligible for purging soon after their corresponding AFT Routes are purged	<b>Enabled:</b> Yes <b>Schedule Type:</b> Business Process <b>Timer or Clock:</b> Clock <b>System:</b> node1 <b>Execution Day:</b> Every Day <b>Scheduled Time(s):</b> 04:00 a.m. <b>Excluded Time(s):</b> None <b>Excluded Dates:</b> None <b>At startup:</b> No <b>Run As User:</b> Admin

## Benefits

The benefits of scheduling include:

- Flexibility, including setting time intervals and excluding dates and times
- Increased efficiency by automating manual processes
- Improved response times with trading partners and other members of value chain
- Automating routine, recurring tasks and controlling when and how often the tasks are completed
- Reducing costs associated with performing activities manually
- Increasing overall productivity by using resources effectively



## Exercise

### 1. Create a Report

## Completed lesson objectives

- Describe the basic of schedules
- Explain different phases in creating schedules
- Explain the procedure to enable, disable and delete schedules
- Explain the steps to set up schedules for reports and stand-alone services.

## Questions



# Lesson 5

## HealthCheck Utility

## Completed lesson objectives

- Explain about HealthCheck tool
- Discuss the importance of HealthCheck tool
- Explain the procedure to install HealthCheck tool
- Describe the steps to customize HealthCheck tool
- Explain the importance of the scripts in Sterling B2B Integrator.

## Overview

There are scripts and files created in the bin directory when the Sterling B2B Integrator is installed.

The scripts and files are in the `install_dir/bin` directory.



Depending on the operating system of Sterling B2B Integrator, script files have one of the following file extensions:

- `.sh` for UNIX
- `.sh.date` for UNIX
- `.cmd` for Windows
- `.cmd.date` for Windows

## Completed lesson objectives

- Explain about HealthCheck tool
- Discuss the importance of HealthCheck tool
- Explain the procedure to install HealthCheck tool
- Describe the steps to customize HealthCheck tool
- Explain the importance of the scripts in Sterling B2B Integrator.

## Questions

