

Sterling B2B Integrator



Resource Management

Version 5.2

Sterling B2B Integrator



Resource Management

Version 5.2

Note

Before using this information and the product it supports, read the information in "Notices" on page 13.

Copyright

This edition applies to Version 5 Release 2 of Sterling B2B Integrator and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2000, 2013.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Resource Management	1	Export Resources Associated With a Resource Tag ..	6
Locked Resources.	1	Export Resources	7
Resource Tags	2	Search for a Resource Tag	8
Versioned and Non-Versioned Resources	2	Create a Resource Tag	8
Resources List	2	Copy a Resource Tag	9
Options for Exporting Resources.	4	Edit a Resource Tag	9
Resource Preservation During an Import	4	Delete a Resource Tag	9
Generation of Backup File During Import.	5	Search for Locked Resources.	10
Skip the Generation of the Backup File During		Unlock Locked Resources.	11
Resource Import	5		
Import Resources.	5	Notices	13

Resource Management

Resources are files, templates, and documents that may be deployed in IBM® Sterling B2B Integrator.

Managing resources can involve:

- Export resources as .xml files or as an installation bundle. You cannot export .war files.
- Import ALL resources one or you can import resources one at a time. You cannot use import .war files.
- Lock and unlock resources.
- Create and modify resource tags (a tag is a name that identifies a group of associated resources)
- Move resources from a test environment into a production environment.
- Import resources that you have converted from another format.

Generally, the import process replaces non-versioned resources with the new data and appends new versions of a resource to existing versioned resources, although you can choose whether to overwrite existing data as part of the import process selections. Key items to remember about importing resources:

- You must manually update imported resources that contain hard-coded, computer-specific information. For example, system paths in scripts must be manually changed to use the new path after importing resources to their new location.
- When importing large files, greater than 10 MB, use the command line tool - import.sh (UNIX) or import.cmd (Windows).
- If private key certificates are found in the import file, you will be prompted to choose if the keys should be imported. If Import All Resources is selected, any private key certificates in the import file will be automatically imported without any prompting.
- If the import resources are from a version of Sterling B2B Integrator older than what you currently have installed, you may have to manually complete the configurations for some resources.

To perform any of these tasks from the **Administration Menu**, select **Deployment > Resource Manager**.

Locked Resources

When a resource is in use, the system locks the resource to prevent other users or resources from accessing it. When the resource becomes free, it is unlocked. With the necessary permission, users can unlock resources manually as well. A resource is locked when it is:

- Checked out
- Being edited
- Currently in use for processing.

In general, locks expire according to configuration settings defined during the installation.

You can use the Lock Manager to monitor and manage resources that are currently locked. For example, you can:

- Search for locked resources by user name, item name, time range, or any combination of these
- View a list of all locked resources
- Unlock locked resources, if you have permission to do so.

Resource Tags

Resource tags are used to identify a group of associated resources. You can:

- Associate a resource with more than one resource tag
- Create resource tags to define your resource groupings
- Create a resource tag during an import resources procedures and assign a new tag while you are importing.

A resource tag is much like a company name, with each department being a Web resource associated with the resource tag. For example, XYZ company has Human Resources, Finance, and Legal departments. The company name, XYZ, is the resource tag, and the Human Resources, Finance, and Legal departments are Web resources that are associated with the XYZ resource tag.

Managing resource tags may involve:

- 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 resource tags that have become obsolete.

Versioned and Non-Versioned Resources

Resources may be non-versioned or versioned:

- Versioned resources, such as business process models and service configurations, may have multiple copies, or versions, saved in the Sterling B2B Integrator system. Each time you modify one of these versioned resources, the system saves the data as a new version, while retaining a copy of the resource as it existed prior to your modifications. Any time you check in a versioned resource, you can set which version of the resource is the default — either the version you are checking in or a previously saved version. The default version is the copy of a resource uses during processing, unless otherwise specified in processing instructions. The concept of versioning is integral to your resource management needs. For example, access to saved copies of each iteration of a resource enables you to easily review the components of older versions or revert to using them at any time. This saves you the effort of storing older versions in another location or reproducing the work involved in creating them if you need to revert to a previous configuration. You can also change which copy is the default version as needed.
- Non-versioned resources are resources, such as user accounts, for which only one current copy is saved at any time. When you modify a non-versioned resource, the new resource replaces the old resource in the system.

Resources List

The following resources are supported:

- Accounts – Configuration data that describes user accounts. Subcategories include: Users, Groups, and Permissions.
- Adapter Policies - Adapter Policies can limit bandwidth, command availability, amount of inbound data, and can lockout users.
- Application Configurations – For SAP, this resource is configuration data that describes application setup.
- Business Processes – Business process model definitions and their associated particulars.
- Communities – Data that describes trading partner communities, including adding or deleting protocols and document types.
- Digital Certificates – User identification data for secure communications, which contains a user's public key, identity information, and one or more digital signatures. Subcategories include: CA, Trusted, and System.
- ebXML Specifications – Data that describes ebXML Business Process Specification Schema (BPSS) and Collaboration Protocol Agreement (CPA) defined when setting up trading profiles.
- Extended Rule Libraries – Data defining a list of extended rules, used in the Map Editor to define complex mapping transactions, saved in a separate file outside of the Map Editor source.
- Group Permissions - Configuration data defined to provide access to different modules within Sterling B2B Integrator and are the foundation of role-based security.
- Maps – Source maps of either the .mxl or .map versions and translation objects (.txo) and XML encoder objects (.ltx).
- Mailboxes – Configuration data for setting up mailboxes and services. When Mailbox metadata is exported, the users, user groups, permissions, virtual roots and routing rules the mailbox needs to function are automatically exported. You do not have to specifically select them for export. Unless you explicitly do not want these additional resources, you should import all of the resources in the export file when you import the mailboxes. This imports the additional resources that the mailboxes need to work correctly.
- OFTP - Odette File Transfer Protocol (OFTP) is a packet-oriented file transfer protocol (RFC 5024) facilitating electronic data interchange of business data between trading partners. (For Sterling B2B Integrator version 5242 and higher)
- PGP Profiles – Pretty Good Privacy (PGP) configuration data used to encrypt and decrypt documents.
- Perimeter Servers – Configuration data defined when setting up perimeter servers and services.
- Proxy Netmaps – Configuration data for netmaps used with IBM Sterling Secure Proxy.
- Proxy Policies – Configuration data for policies used with Sterling Secure Proxy.
- Report Configurations – Configuration data defined when specifying the reports to be generated.
- Schedules – Configuration data used to define business processes and services.
- Security Tokens – Configuration data defined to ensure that only authorized users can access the data associated with the token, such as by identifying and checking the credentials of Web Services users so that they can send and receive documents.
- Service Configurations – Data defined when creating service configurations (restricted to operator-level permissions).

- SSH Keys – Security key data used for authentication between partners when establishing a session for SSH/SFTP or SSH/SCP data transfer.
- SWIFTNet Routing Rules – The SWIFTNet Routing Rule is created by the Responder and is used by the SWIFTNet Server adapter to manage interactive messages from the SWIFTNet MEFG Server. The rule routes an incoming request message to a user-defined business process.
- Trading Partner Data – Configuration data defined with trading profiles. Subcategories, known as partner resources, include, Packagings, Identities, Contracts, Envelopes, Control numbers, and Code lists.
- User Groups - Configuration data defined for role-based security, enables you to maintain access permissions for multiple users from a central location. Enables the association of many permissions to different users by creating groups for each job function, instead of each user.
- User Permissions - Configuration data defined to provide access to different modules within Sterling B2B Integrator and are the foundation of role-based security.
- Web Resources – Data that makes up XSLT style sheets.
- Web Services – Configured resource data that makes up Web services, including service and adapter configurations, digital certificates, business process models, XML schemas, WSDL, and Web services group configurations.
- WSDL – Data that describes Web Service Definition Languages (WSDL).
- XML schemas – Data that makes up XML schemas.
- XSLTs – Data that makes up XSLT style sheets.

Options for Exporting Resources

When you perform an export, you select one or more types of resources to export. Then, the export wizard provides options for specifying by version and resource tag which copies of each selected resource you want to export. The version-related options are:

- Standard – exports copies of the non-versioned resources and the default version of versioned resources.
- Advanced – export copies of the non-versioned resources and, for versioned resources, enables you to choose either to export only default versions or all versions.

You can export resources that are associated with a particular resource tag or choose to export resources independently of any association with a tag. Resources associated with a tag are not tied to the tag; you can export them without selecting the associated tag.

Resource Preservation During an Import

When you import resources that have prior copies previously saved, you can use the Update Object option to indicate whether or not you want to overwrite existing data.

The following table describes how this option works:

Object Type	Preserve Existing Resource	Update the Resource (overwrite the existing data)
Non-versioned resources	When a record already exists, nothing is imported. The import process does not change existing records.	The import replaces the existing records.
Versioned resources	The import does not change any versions currently in the system, and adds only new versions.	The import appends new versions to the list of previously saved versions, incrementing by one.

Generation of Backup File During Import

During import, you can create a backup.xml file of resources as they existed prior to import. This enables you to overwrite existing data without fear of losing the data permanently. Using the backup file, you can import the old data back into Sterling B2B Integrator if needed.

The backup data is generated as follows:

- For any resource objects you import that have a pre-existing copy, the backup file preserves a copy of the data as it existed prior to the import procedure. For example, if you import three updated copies of existing envelopes, the file will contain a record of those three envelopes before the update.
- No backup data is generated for any new resources you import.
- The file is named backup.xml by default. You can change the name of the backup file when you download it.

Skip the Generation of the Backup File During Resource Import

Skipping the generation of the backup file may reduce out of memory errors. If you use this option you need to make alternate arrangements for backup of files. If the backup generation is skipped, the following warning message is displayed:

Backup generation has been turned off, make sure you have another form of backup.

You can also skip the backup generation by using Import Service. The Import Service is used in a business process to automatically import resources exported using the Resource Manager. This optional Backup parameter identifies the path where the backup is saved. If the path is invalid during backup, the file is written to /install_dir/tmp and a message is added to the Import Report indicating the location. If the Backup parameter is not specified, then the backup is not generated.

Import Resources

Before you begin

You must know whether you are going to import all or a subset of the resources from the export file. When an export file containing Mailboxes is created, additional resources that the mailboxes need to work correctly are included in the export file. Unless you explicitly want to exclude these additional resources, you should use the **Import All Resources** Tuning Option for importing these Mailbox resources.

About this task

This task is done on the System Administrator Console.

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Import/Export**.
2. Next to **Import Resources**, click **Go!**
3. Enter the **path** and **file name** to import, or use **Browse** to locate and select the file. If the import returns a message that the file contains errors, you can either select the file and click **Next** again to continue the import, or click **Cancel** to stop the import process.
4. Under **Tuning Options**, if you want to **Skip Backup Generation**, select the checkbox. The following warning message is displayed:
Backup generation has been turned off, make sure you have another form of backup.
5. Click **OK** to continue. If you do not select backup generation, then a backup version of the files is saved and you can review it after you complete this procedure.
6. Under **Tuning Options**, if you want to **Import All Resources**, select the checkbox. If you do not select this option, you are prompted to select entries to import for each resource type. If private key certificates are found in the import file, they are automatically imported without any prompting.
7. Click **Next**.
8. Do you want to create a resource tag for the data being imported?
 - If Yes, enter a **Tag Name** and **Description** for the resource tag and click **Next**.
 - If No, click **Next**.
9. Indicate whether you want to update objects that may already exist with objects from the import, and click **Next**.
10. Review the information.
11. Click **Finish** to import the data. The following items are displayed as links on the page:
 - **View Import Report** - Click the link to review the Import Report.
 - **View Performance Report** - Click the link to review the summary data in the Performance Report.
 - **Data in SI before Import (xml)** - Click the **Download** link to get a backup copy of the data. This link is not displayed if you selected the **Skip Backup Generation**.

Export Resources Associated With a Resource Tag

About this task

To export resources associated with a resource tag:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Import/Export**.
2. Next to **Export Resources**, click **Go!**
3. Select the file export type and click **Next**.

4. Select **Yes** to indicate that you do want to export resources associated with a tag.
5. Select the **Resource tag** from the list.
6. Click **Next**.
7. If you are prompted for the system passphrase, you will need to enter and confirm your passphrase and click **Next**.
8. If private certificates are included in the resources tags, you are prompted to decide if you want to export the private certificates.
9. Click **Next**.
10. Review the information for the resources to be exported.
11. Click **Finish** to create the export file.
12. If you want to review the export report, click **View Export Report**.
13. Click **Download** Export data to download the export file to a hard drive or disk where you will store it
14. In the **File Download** dialog box, click **Save**.
15. Select the location where you want to save the export file and click **Save**.

Export Resources

Before you begin, you need to know if you are going to export using the standard or advanced options.

About this task

To export resources:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Import/Export**.
2. Next to **Export Resources**, click **Go!**
3. Select the file export type and click **Next**.
4. Select **No** to indicate that you do not want to export resources associated with a tag.
5. Click **Next**.
6. Select the type of export, **Standard** or **Advanced**.
7. Select the Resources to be exported.
8. Click **Next**.
9. For each resource type selected you need to:

For a Standard Import:	For an Advanced Import:
<ul style="list-style-type: none"> • Select the resources from the list or by moving the resources from the Available to the To be Exported list. • Click Next. <p>The system automatically exports only the default version of the resources you select here.</p>	<ul style="list-style-type: none"> • Select the resources from the list or by moving the resources from the Available to the To be Exported list. • If you want to export all the versions, select Export All Versions • Click Next. <p>If you do not select Export All Versions, only the default version will be exported.</p>

10. If you are prompted for the system passphrase, you will need to enter and confirm your passphrase and click **Next**.
11. Review the information for the resources to be exported.
12. Click **Finish** to create the export file.
13. If you want to review the export report, click **View Export Report**.
14. Click **Download** Export data to download the export file to a hard drive or disk where you will store it
15. In the **File Download** dialog box, click **Save**.
16. Select the location where you want to save the export file and click **Save**.

Search for a Resource Tag

About this task

To search for a resource tag:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Resource Tags**.
2. Complete one of the following actions:
 - Under **Search** in the **Resource Tag** field, enter a portion of the name or the entire name of the resource tag you are searching for and click **Go!**
 - Under **List** in the **Alphabetically** field, select **ALL** or the letter that begins the name of the resource tag you are searching for and click **Go!**

Create a Resource Tag

About this task

To create a resource tag:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Resource Tags**.
2. Next to **Create a new Resource Tag**, click **Go!**
3. Enter the **Resource Tag** name. Do not use special characters in the name.
4. Enter a **Description** of the resource tag and click **Next**. Do not use special characters in the description.
5. Select the types of resources to associate with this resource tag and click **Next**. When creating a resource tag for a Web archive (.war) file for Web Extensions, select **Business Processes** and **Web Resources** as the resource types.
6. For each resource selected, you need to associate the resource with a resource tag. For some resources you will move resources from the **Available List** to the **To Be Associated**, for other resources you will select the type of resources to associate.
7. Click **Next**.
8. Review the information on the confirmation page.
9. Click **Finish**.

Copy a Resource Tag

About this task

To create a copy of a resource tag:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Resource Tags**.
2. Using either the **Search** or **List** option to locate the resource tag you want to copy.
3. Next to the resource tag you want to copy, click **copy**.
4. Enter a new name for the **Resource Tag** name. Do not use special characters.
5. Enter a new resource **Description**. Do not use special characters.
6. Click **Next**.
7. In the **Resource Types** list, make any changes to the resource type selections you want to associate with this resource tag and click **Next**.
8. For each resource selected, you need to review/associate the resource with a resource tag. For some resources you will move resources from the **Available List** to the **To Be Associated**, for other resources you will select the type of resources to associate.
9. Click **Next**.
10. Review the information on the confirmation page.
11. Click **Finish**.

Edit a Resource Tag

About this task

You can edit previously saved resource tags to add or remove associated resources. You cannot modify the Resource Tag value. To create a tag having the same properties but a different name, make a copy of the resource tag, which involves assigning a new name.

To edit a resource tag:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Resource Tags**.
2. Using the **Search** or **List** options to locate the resource tag to edit.
3. Next to the resource tag you want to edit, click **edit**.
4. Modify the resource tag parameters, as needed.
5. Click **Next** to proceed through the wizard.
6. Review the information on the confirmation page.
7. Click **Finish**.

Delete a Resource Tag

About this task

To delete a resource tag:

Procedure

1. From the **Administration Menu**, select **Deployment > Resource Manager > Resource Tags**.
2. Use either the **Search** or **List** option to locate the resource tag to delete.
3. Next to the resource tag to delete, click **delete**.
4. Verify that the resource tag information matches the resource tag you want to delete.
5. Click **Delete**.

Search for Locked Resources

About this task

To search for locked resources:

Procedure

1. From the **Administration Menu**, select **Operations > Lock Manager**.
2. Enter your search criteria using the following fields and click **Go!**:

Field or Selection	Description
User Name	Returns user names of users currently owning a lock on any locked resources containing the specified character or string.
Item Name	Returns resource names for any locked resources containing the specified character or string.
Start Date and time	<p>Specify the date and time to start a range in which to search for locked resources. The search returns resources locked within the specified start and end dates and times.</p> <p>The start dates and times displayed by default depend on whether the system has currently locked resources, as follows:</p> <ul style="list-style-type: none">• If the system has no currently locked resources, the Start Date displays the current system date and time minus one minute and the End Date displays the current system date and time plus one minute.• If resources are currently locked, the Start Date displays the date and time the earliest resource was locked and the End Date displays the date and time the resource with the latest start date and time was locked.
End Date and time	Specify the date and time to end a range in which to search for locked resources. The search returns resources locked within the specified start and end dates and times.
List Alphabetically	Select either ALL to display a list of all locked resources, or a letter to display a list of all locked resources beginning with the selected letter. ALL is the default value.
List By	Select either User Name or Item Name to display a list of all locked resources according to your selection in the List Alphabetically field and this field.

3. Review the information for the listed resources. This following information is displayed:
 - **Automatically refresh every 60 seconds** – This is the default; to turn off the auto-refresh, remove the check

- **Lock** – Remove the check if you are certain that it is safe to unlock the resource
- **User Name** – Name of the Sterling B2B Integrator user
- **Item Name** – Name of the locked item
- **Type** – Type of resource that is locked (such as business process, map, or schema)
- **Time Stamp** – Date and time the resource was locked
- **Expiration Time** – Date and time the resource lock expired or will expire, and how much time is left until the lock expires
- **Clear On Startup** – Indicates whether the lock will be released if the system is shut down and restarted.

Unlock Locked Resources

About this task

To unlock locked resources:

Procedure

1. From the **Administration Menu**, select **Operations > Lock Manager**.
2. Use the **Search** or **List** option to locate the locked resource you want to unlock.
3. In the **Lock Manager** search results page, under **Lock**, clear the check box next to the resource you want to unlock.
4. Click **OK**.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

19-21, Nihonbashi-Hakozakicho, Chuo-ku

Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be

incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation

J46A/G4

555 Bailey Avenue

San Jose, CA 95141-1003

U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2015. Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2015.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and [ibm.com](http://www.ibm.com)[®] are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at <http://www.ibm.com/legal/copytrade.shtml>.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java™ and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect Control Center®, Connect:Direct®, Connect:Enterprise®, Gentran®, Gentran®:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce®, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.



Product Number:

Printed in USA