



Analytics and Mobility

Narrowcast Server Upgrade Guide



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BOOK OVERVIEW AND ADDITIONAL RESOURCES

The MicroStrategy Narrowcast Server Upgrade Guide describes the procedure for upgrading to later versions of MicroStrategy Narrowcast Server. It offers important recommendations that guide you during the upgrade process. It also covers the new features and enhancements available within the new MicroStrategy Narrowcast Server version that you wish to install.

It is highly recommended that you review and follow the upgrade procedure outlined in [Chapter 2, Upgrading the Test Environment](#).

This guide does not include instructions on installing MicroStrategy Narrowcast Server. Refer to the *Narrowcast Server Installation and Configuration Guide* for information on installing and configuring Narrowcast Server.

Specifically, this guide provides the following information:

- [New Features in Narrowcast Server](#)
- [Chapter 2, Upgrading the Test Environment](#)
- [Chapter 3, Testing the Upgrade](#)
- [Chapter 4, Upgrading the Production Environment](#)

Detailed steps for all functionality and interfaces in the MicroStrategy system are available in the online help.

UPGRADING THE TEST ENVIRONMENT

This chapter lists in detail the steps to copy the Narrowcast Server repositories and then to upgrade those copies of the Narrowcast Server system to a later version. You can then use subsequent chapters to test the upgrade, and then upgrade your production system.

The high level steps to upgrade the Narrowcast Server system are listed below:

- 1 [*Copying Narrowcast Server repositories using the Repository Copy Tool, page 8*](#)
- 2 [*Registering the copied version of your Narrowcast Server system, page 12*](#)
- 3 [*Upgrading the copied Narrowcast Server system, page 14*](#)
- 4 [*Registering the upgraded Narrowcast Server system , page 15*](#)
- 5 [*Configuring the upgraded system to assign new machines, page 15*](#)
- 6 [*Configuring the Subscription Portal , page 16*](#)

Best practices

Review the following recommendations to help ensure the successful upgrade of Narrowcast Server to the latest version.

- Migrate MicroStrategy Web deliveries to MicroStrategy Distribution Services when upgrading to Narrowcast Server 9.x. For detailed steps to migrate Web deliveries, see the MicroStrategy Developer Help.
- When creating Data Source Names (DSNs), use the MicroStrategy Connectivity Wizard.
- Perform the upgrade on the copied repositories, and not on the production repositories. The upgrade steps in this section follow this recommended practice.

- While copying the repositories, the source and the target system prefix should be different.

Prerequisites

Before you begin upgrading the Narrowcast Server system, perform the following important steps:

- Create a backup of the Narrowcast Server repositories.
- Ensure that sufficient space is available to copy all Narrowcast Server tables to the Object Repository (OR), Subscription Book Repository (SBR), and Portal Repository. See the administration documentation of your database for information on how to increase the database size, if necessary.
- Data Source Names (DSNs) should be created to the repositories of the existing system (the system that is being copied), and to the location where the existing repositories will be copied.

Copying Narrowcast Server repositories using the Repository Copy Tool

Narrowcast Server contains a Repository Copy Tool to copy the Narrowcast Server Object Repository (OR) and Subscription Book Repository (SBR). This tool also ensures that no changes are made to the existing Narrowcast Server system while the repositories are being copied. Using the Repository Copy Tool also ensures that references to Distribution Managers (DM) and Execution Engines (EE) are removed from the copied repositories.

Note the following when you use the Repository Copy Tool:

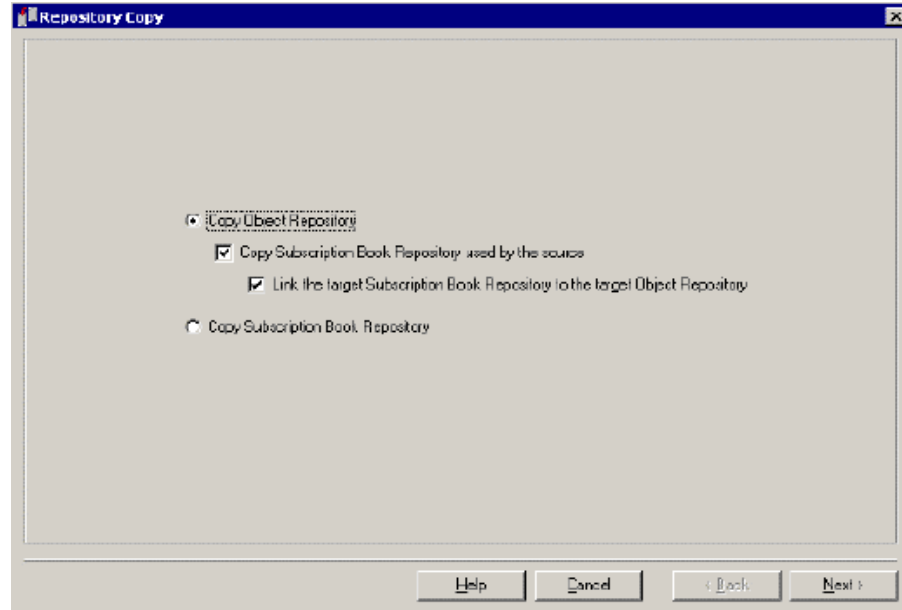
- Microsoft Access databases can be copied to any other database server, but non-Access databases can only be copied to other non-Access database servers.
- The source and target system names should be different.
- The source and target prefixes should be different if the repositories are copied to the same database. If you are using a different database to copy the repositories, the source and target prefixes can be the same.

The process of copying the repositories can take time to complete, depending on the size and number of objects in the OR and SBR. It is recommended that you start the repository copying process when activity on the source system is minimal. This minimizes the possibility of differences between the existing Narrowcast Server system and the copied repositories, in terms of the subscriptions that may be created after the repositories are copied.

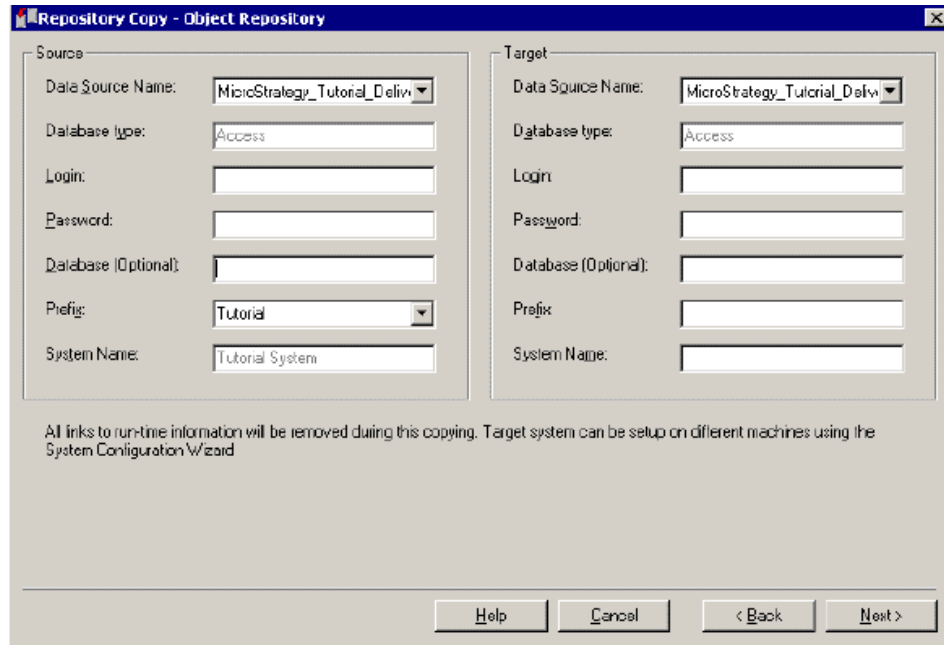
The following procedure assumes that you are using the Repository Copy Tool on the earlier version of Narrowcast, which is the version you are upgrading from.

To copy the Narrowcast Server OR and SBR

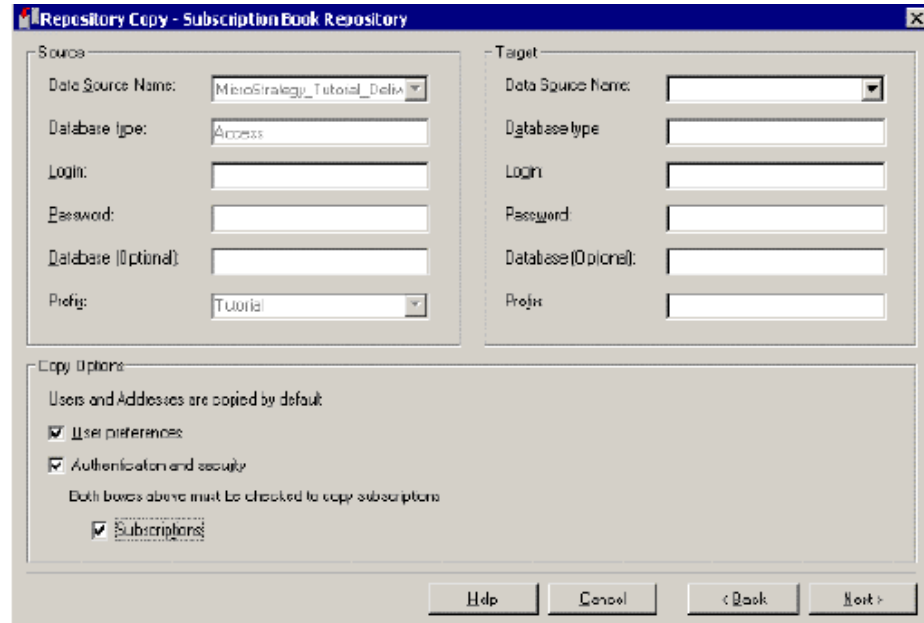
- 1 On the earlier version of Narrowcast, from the **Start** menu, select **Programs**, then **MicroStrategy Tools**, then **Narrowcast Administrator**. MicroStrategy Narrowcast Administrator opens.
- 2 From the **Tools** menu, select **Copy Repository**. The Repository Copy dialog box opens.



- 3 Select **Copy Object Repository** to copy the OR from the source folder. The following options are enabled:
 - Copy Subscription Book Repository used by the source: Select this check box to copy the SBR used by the source. It is recommended that the SBR and OR should be copied at the same time.
 - Link the target Subscription Book Repository to the target Object Repository: Select this check box to link the target SBR to the target OR. It is recommended to preserve the link between the target repository and the Object Repository, so that the copied SBR and OR are connected and existing services are triggered after the upgrade.
 - Copy Subscription Book Repository: Select this option only if you want the tool to copy the SBR without maintaining a link to the source OR.
- 4 Click **Next**. The Repository Copy - Object Repository page opens. The source and target information of the OR is displayed.




- 5 Verify the information presented. The Prefix is the repository prefix. Leave it blank if no prefix exists. Then click **Next**. The Repository Copy - Subscription Book Repository page opens.



- 6 By default, users and user addresses are copied. The copy options that you can select are:

- **User preferences:** Select this check box to copy the user preferences.
- **Authentication and security:** Select this check box to copy authentication details and security objects.
- **Subscriptions:** Select this check box to copy the subscriptions.

 The Subscriptions check box is enabled only when the User preferences and Authentication and security options are selected.

7 Click **Next**. The Repository Copy - Summary page opens. Verify the information and click **Finish**. The repository information is copied.

The copied repositories are completely independent of your existing Narrowcast Server system. Once the repositories are copied, you need to register the copied system and upgrade the copied system. Steps to do this are below.

Registering the copied version of your Narrowcast Server system

You must register the copied version of your Narrowcast Server system on the earlier version of Narrowcast Server, before upgrading the system. You must register the system so that you can see it in the Narrowcast Administrator's console.

To register the copied version, navigate to the **System** menu and select **Register Existing System**. The System Configuration Wizard opens. For more information about using the System Configuration Wizard, see the *Narrowcast Server Installation and Configuration Guide*.

Once the copied version of your Narrowcast Server system is registered, you must change the Intelligence Server references so that your system does not connect to the production Intelligence Server. For each

Information Source Module, specify the name of the Intelligence Server machine, using the steps below.

To update Intelligence Server references

- 1 In Narrowcast Server Administrator, expand **Administration**, then expand **Information Source Modules**.
- 2 Expand **MicroStrategy**. The Information Source Modules are displayed.
- 3 Right-click the required Information Source Module and select **Edit**. The Information Source dialog box opens.
- 4 Click **Define**. The Information Source Wizard – Intelligence Server opens.
- 5 In the **Intelligence Server Machine Name** field, type the name of the Intelligence Server machine with the newer version of Intelligence Server.
 - Alternatively, you can browse to select the required machine. The Browse for Computer dialog box opens. Select the machine and click **OK**.
- 6 Click **Next**. On the Summary page, verify the information and click **Finish** to remove the existing Intelligence Server from the Information Source.

 Note the following:


- Once the system is registered, verify your credentials for login and authentication.
- If you are using Intelligence Server clustering, edit the corresponding information in the Intelligence Server Properties dialog box of Narrowcast's Information Source Wizard.

Upgrading the copied Narrowcast Server system

The upgrade is performed on the copied version of Narrowcast Server. After registering the Information System, perform the following steps to upgrade.


To upgrade the copied Narrowcast system

- 1 Create Data Source Names (DSN) to the copied OR and SBR on the machine where the later version of Narrowcast Server is installed.


 The DSN for the later version of the OR can be different, but the DSN for the SBR needs to be retained. You can provide the DSN of the OR, and the DSN information for the SBR is automatically chosen from the OR.


- 2 In the later version of the Narrowcast Server application, select **Upgrade Narrowcast Server System** from the **Tools** menu. The Narrowcast Server Upgrade dialog box opens.

Because the system is registered, the prefix, database type, data source name, user name, password, and database information are automatically generated.

By default, the **Commit changes incrementally** check box is selected. Selecting the Commit changes incrementally option reduces the memory consumption of the machine that is being used for the upgrade. The copied  Narrowcast Server system is incrementally upgraded. For example, if you are upgrading from 8.1.2 to 9.0.2, the upgrade proceeds from 8.1.2 to 9.0 to 9.0.1 to 9.0.2. You are prompted after each version upgrade is finished.

- 3 Click **Upgrade**. The MicroStrategy Upgrade dialog box opens.
- 4 Click **OK** to continue with the upgrade.

 Canceling retains Web deliveries objects in the Narrowcast Server repositories and disables the Web deliveries services, but allows the upgrade process to continue. Retained objects can later be migrated to Distribution

Services from upgraded Narrowcast Server repositories. However, this migration is possible only if the upgraded Narrowcast Server repositories were either your production repositories or a database copy of the repositories. If  you are upgrading the repository copies created using the Repository Copy Tool, it is strongly recommended that you click **OK** and continue with the upgrade. Retained objects inside such repositories cannot be migrated later.

Registering the upgraded Narrowcast Server system

The upgraded system should be registered. To register the system, navigate to the **System** menu and select **Register Existing System**. The System Configuration Wizard opens. For more information about the System Configuration Wizard, see the *Narrowcast Server Installation and Configuration Guide*.

Configuring the upgraded system to assign new machines

When the repositories are copied, references to Distribution Manager and Execution Engine are removed. To assign new machines for DM and EE, you need to configure the upgraded system as follows.


To configure the upgraded system to assign new machines to DM and EE

- 1 From the **System** menu, select **Configure New System**. The System Configuration Wizard opens.
- 2 On the Clustering page, specify the appropriate information for the new machines.
- 3 Click **OK**.

Configuring the Subscription Portal

From the earlier version of the Narrowcast Server system, copy the Subscription Portal and DBDriver property files located by default at `Program Files\Common Files\MicroStrategy\Config` to the location where the newer version of Narrowcast Server is installed.

You can also configure the Subscription Portal using the System Configuration page in the Portal Administrator of the newer version of the Narrowcast Server system.

 Selecting the **Create a Subscription Portal Site** check box creates a new portal repository at the same location. However, since the Portal Repository from the existing version of Narrowcast Server is available, creating a new portal site is not required.

Finalizing the upgrade process

Once the repositories are copied and the copied system is upgraded, you must review and confirm the following points to ensure that the upgrade is complete:

- Review pre-/post-SQL statements

Because the Narrowcast Server system has inherited all the subscription sets from the existing Narrowcast Server system, all the pre-/post-SQL instructions are available in the subscription sets. Review the pre-/post-SQL statements and the database locations where the statements are executed. Reviewing these statements ensures that the service executions of the upgraded Narrowcast Server system do not interfere with the pre-/post-SQL executions of the existing system.

- Check reconfiguration for custom modules

Check whether reconfigurations are necessary in any of the custom modules, such as Information Sources and Transmitters, that you may have integrated into Narrowcast Server.

After the upgrade, you must test whether the upgrade was successful. For information on testing the upgraded system, see [Chapter 3, Testing the Upgrade](#).

TESTING THE UPGRADE

This chapter shows you how to test the upgraded Narrowcast Server system in your test environment. It assumes that you have already upgraded the Narrowcast Server system as described in [Chapter 2, Upgrading the Test Environment](#).

The high level steps to test the upgraded Narrowcast Server system are:

- 1 [Modifying the configuration of the target system , page 19](#)
- 2 [Testing functional areas, page 22](#)
- 3 [Testing service execution behavior, page 26](#)
- 4 [Testing Subscription Portal behavior, page 27](#)

The detailed steps for the procedures listed above are in this chapter.

Modifying the configuration of the target system

Before testing the upgraded Narrowcast Server system, you need to modify the configuration to prevent message delivery and data changes. The steps to modify the configuration of the Narrowcast Server system include modifying email, file, print, SMS, portal delivery, and data warehouse.

Start the Narrowcast Server system and modify the following functionality, using the steps that follow.

Email delivery

Modify the message output for the Email (SMTP) Information Transmitters to transmit messages to a test folder using the following steps.

To modify email delivery configuration

- 1 In Narrowcast Server Administrator, expand **Administration**, expand **Information Transmitters**, right-click **Email (SMTP)**, and select **Edit**. The Information Transmitter - Email (SMTP) dialog box opens.

- 2 Select the **Show Advanced Properties** check box to display the additional tabs.
- 3 On the Message Output tab, select the **Save to File** option to save the generated email message files. The files are saved at the location specified in the **Save to folder** field.
- 4 Click **OK**.

File delivery

Modify the Device Editor General properties for a file to specify a test file location using the following steps.

To modify file delivery configuration

- 1 In Narrowcast Server Administrator, expand **Administration**, expand **Devices**, and select **File System**.
- 2 Right-click the file device and select **Edit**. The Device Editor: Saved File for File dialog box opens.
- 3 Modify the file delivery path in the **File location** field. You can click **Browse** to navigate to and select a test location for file delivery.
- 4 Click **OK**.

Print delivery

Modify the Device Editor General properties for print delivery to specify a test printer location using the following steps.

To modify print delivery configuration

- 1 In Narrowcast Server Administrator, expand **Administration**, expand **Devices**, and select **Printer**.
- 2 Right-click the print device and select **Edit**. The Device Editor: Default Printer for Print dialog box opens.

- 3 Modify the printer path by selecting a test printer from the **Printer Location** drop-down list. For information on adding a test printer, see the *Narrowcast Server System Administrator Guide*.
- 4 Click **OK**.

SMS delivery

Modify the SMSC IP address so that it no longer points to a valid destination, using the following steps. For example, you can use a test IP address to point to the test machine.

To modify SMS delivery configuration

- 1 In Narrowcast Server Administrator, expand **Administration**, expand **Information Transmitters**, right-click **SMS (SMPP)**, and select **Edit**. The Information Transmitter - SMS (SMPP) dialog box opens.
- 2 Type the IP address of the test machine in the **SMSC IP Address** field.
- 3 Click **OK**.

Portal delivery

The portal information transmitter transmits the messages to the Subscription Book Repository database. Therefore it is not necessary to disable the portal information transmitter.

Data warehouse

If the subscription sets in the application use pre- or post-SQL statements to modify the contents of a database, you should remove the SQL statements using the following steps. The SQL statements are removed from the subscription sets in the target system to avoid accidental data changes.

To modify data warehouse configuration

- 1 In Narrowcast Server Administrator, expand **Applications**, expand **My First Application**, and select **Subscription Sets**.
- 2 Right-click an available subscription set and select **Edit**. The Subscription Set Editor - New Subscription Set dialog box opens.
- 3 From the **Edit** menu, select **Subscription Set Properties**. The Subscription Set Properties dialog box opens.
- 4 From the Pre-execution SQL and Post-execution SQL Specification tabs, select the available SQL statements and click **Remove**. The SQL statements are removed.
- 5 Click **OK**.

Testing functional areas

Test the following functional areas on the upgraded Narrowcast Server system:

- *Information objects, page 22*
- *User Information Source , page 23*
- *Dynamic subscriptions , page 24*
- *SMTP information transmitters, page 25*
- *XSL stylesheets, page 25*
- *MicroStrategy Logging Server, page 26*

Information that needs to be tested for each area is listed below.

Information objects

Test whether the subscription information and content information objects are upgraded to use prompts in the report for segmentation.

Subscription and content information objects

The subscription information object is the original subscription and content information object, with the role set to subscription only.

The content information object is created as a copy of the subscription and content information object. The role is set to content, and personalization mode is set to personalized page execution. This information object is named "Content IO for Sub IO - %%Sub IO Name%%" and is saved in the same folder as the subscription information object.

If the subscription and content information objects have been used in Narrowcast documents, all documents are modified to use this newly created content information object.

Content information objects using personalized page execution

Content information objects executed in personalized page execution mode that use segmentation are upgraded to content information objects executed in personalized page execution mode where segmentation is performed using prompts in the report.

User Information Source

The User Information Source is hidden, along with the corresponding information objects and question objects.


Test whether you can:

- Add information objects to documents. Right-click the document and select **Edit**. The Document Editor is displayed. Click **Insert** and select **New Information Object**.
- Edit the available user information properties. Select **Edit Available User Properties** from the **Tools** menu in Narrowcast Administrator. For an introduction to user information properties, see the *Narrowcast Server System Administrator Guide*.

- Set user information for a new account. To do this, create a new account in the Subscription Portal. You are prompted for information in the user information section of Narrowcast Administrator. You can provide user information through the Subscription Portal or the User Editor dialog box in Narrowcast Administrator.

Dynamic subscriptions

For the Narrowcast Server system you are upgrading, you can specify whether information sources should support dynamic subscriptions.

-  When dynamic subscriptions are not supported by an information source, the subscription administrator cannot define subscription and/or segment information objects for that information source.

When the Narrowcast Server application is upgraded, the information source is upgraded to support dynamic subscriptions. The information source definition is modified to include the attribute form used in one of the subscription objects for the subscription ID. The attribute form is included in the list of available attribute forms in the dynamic subscription setup area of the Information Source Wizard. The system administrator should also execute the Information Source Wizard to ensure that the dynamic subscription properties are correctly set up.

Subscription, content, and segment information objects of information sources supporting dynamic subscriptions are upgraded. In the upgraded application, test whether the information objects function as described below:

- Subscription information objects are upgraded to retrieve subscription information from a selected report, rather than retrieving subscription information directly from the project based on the information source definition.
- Subscription and content information objects use prompts in the report for segmentation rather than segmenting the automatically returned information.

- Segment information objects are still used by dynamic subscription sets to segment the subscription set.

SMTP information transmitters

SMTP information transmitters are upgraded to preserve the existing information transmitter name and support all devices supported by the older version of Narrowcast Server.

XSL stylesheets

The Delivery Engine in Narrowcast Server uses an upgraded XML parser and XSL processor. These components enforce more strict adherence to XSL stylesheet content and element usage rules and standards.

For example, the copyright symbol © is not a legal symbol in XSL stylesheets unless a character set containing the symbol is explicitly referenced as the stylesheet character set. Therefore, an XSL stylesheet that includes this character but does not specify the use of a specific character set causes XSL transformation to fail. Similarly, XSL stylesheets that violate other parser rules also cause XSL transformation to fail.

Standard XSL stylesheets

XSL stylesheets that were installed and configured with Narrowcast Server are automatically modified by the upgrade tool. If you modified one of the standard XSL stylesheets, you need to update the customized stylesheet file to adhere to the XSL standards. You must reload the imported XSL stylesheet file object that uses it.

Custom XSL stylesheets

Custom XSL stylesheets can fail during XSL transformation in the document element processing phase of service execution. The upgrade tool does not correct XSL stylesheet errors. You need to test and correct each custom XSL stylesheet in the upgraded system, as required.

MicroStrategy Logging Server

When the Narrowcast Server application is upgraded, the message format and the message contents used for messages sent through the MicroStrategy Logging Server change. Though the changes do not have an impact on product functionality, you need to modify the custom-built message parsers and handlers to work correctly with the new message format.

Testing service execution behavior


Use the Narrowcast Administrator application to test the services execution behavior of the upgraded application on the target system. If you have used a different machine to upgrade the application, you need to register that machine by selecting **Register Existing System** from the **System** menu.

If your organization has a test procedure available, use the test procedure to test service execution. You can also test the service execution behavior by performing the following steps.

To test service execution after upgrading

- 1 Start the Narrowcast Server application.
- 2 From the **Tools** menu, select **View System Messages** to view error information. The error messages are displayed in the System Message Viewer: Tutorial System dialog box.
- 3 Expand **Administration** and select **Scheduled Services**. Check the service queue to ensure that the scheduled services are available.
- 4 Manually run each service with each subscription set it can use, one at a time. To do this, right-click the service and select **Run Immediately**. Check the System Message Viewer for errors during service execution.

- 5 Create a test subscription set that includes a test subscription for each supported locale and device in the target system. Then add this subscription set to every active service. For information on creating a subscription set, see the *Narrowcast Server Application Designer Guide*.

 If you already have a test subscription set available, you do not need to create another one. You can use the existing test subscription set to test the subscriptions.

- 6 Manually run each service with the test subscription set. To do this, right-click the service and select **Run Immediately**. Check the messages generated to ensure that the correct content is being delivered.
- 7 Note and deactivate all the active schedules to disable service execution. To do this, right-click the schedule and select **Activate** or **Deactivate**.
- 8 Re-enable message delivery via email and SMS. To do this, select the **Send to Recipient via SMTP** option from the Information Transmitter – Email (SMTP) dialog box. For more information, see the *Narrowcast Server System Administrator Guide*.

Testing Subscription Portal behavior

If your organization has a test procedure available, use that procedure to test the Subscription Portal behavior. You can also check the following in the Subscription Portal website to test the Subscription Portal behavior in the upgraded application:


- Authentication behavior of the application when you log on to the upgraded target system.
- Availability and behavior of the locales (languages) on the upgraded Subscription Portal. To do this, on the User Preferences page, ensure that choosing a different language changes the Subscription Portal interface text to display the appropriate content.

- Availability of devices and whether addresses can be created, modified, and removed using the devices.
- Whether subscriptions to each service can be viewed, created, modified, and deleted. Check the test services with dynamic subscription set capabilities.
- Whether subscription preferences can be modified.
- Whether reports delivered to the Subscription Portal can be viewed.

UPGRADING THE PRODUCTION ENVIRONMENT

This chapter explains the procedure to upgrade your production system. It is assumed that you have upgraded the Narrowcast Server system in a test environment and tested the upgraded Narrowcast Server System. For more information, see [Upgrading the Test Environment, page 6](#) and [Testing the Upgrade, page 18](#).

Upgrading the production system is the final step in the process of upgrading your existing Narrowcast Server system. Performing this step changes your existing Narrowcast Server from its current version to the new version.

 Before upgrading to 9.0, Web deliveries must be migrated to Distribution Services, as the upgrade process will remove all the Web deliveries information. Information to perform this important preparation step is below.

The high-level upgrade tasks include the following:

- 1 [Shutting down the existing version of the production system, page 30](#).
- 2 [Installing the later version of Narrowcast Server on production machines, page 31](#).
- 3 [Preparing to upgrade, page 31](#).
- 4 [Upgrading the older version on the production system, page 32](#).
- 5 [Modifying the upgraded production system to use production machines, page 34](#).
- 6 [Merging changes from the testing system, page 34](#).
- 7 [Restarting the production system, page 34](#).

Shutting down the existing version of the production system

To begin upgrading your production system, you must first shut down your existing system using the earlier version of Narrowcast Administrator. This

step is necessary to ensure that new subscriptions are not created in your system and services are not executed until after the upgrade is completed.

Installing the later version of Narrowcast Server on production machines

- 1 Before you begin the installation process, append `.backup` to all files that have the extension properties in the application folder (`Program Files\MicroStrategy\Narrowcast Server`) and its subfolders, and the common files folder (`Common Files\MicroStrategy`) and its subfolders. These files might be overwritten during the installation process, making it difficult to restore your earlier version configuration in the event that you need to do so.
- 2 Refer to the *MicroStrategy Readme* files to ensure that installation can be performed on existing hardware. However, if additional hardware is available for Delivery Engine components, these machines can be used to reduce production system down time during the installation process.
- 3 Install the later version of Narrowcast Server on production machines. Refer to the *Narrowcast Server Installation and Configuration Guide* for steps for product installation and configuration.

Preparing to upgrade

- If you are upgrading your production system to machines other than the ones currently used for production, ensure that data source names are available pointing to the Object Repository, Subscription Book Repository, and Portal Repository of the system to be upgraded.
- Ensure that sufficient space is available in the Object Repository, Subscription Book Repository, and Portal Repository databases to copy all Narrowcast Server tables in these locations. Also, the upgrade process requires additional working space in these locations for

transaction management. For these reasons, it is advisable to have at least three times as much space freely available in each of these database locations as is occupied by the current tables. Refer to your database administration guide for information on how to increase database size, if necessary.

- The upgrade process provided with Narrowcast Server assumes that the system you want to upgrade is the system registered on the machine where the Upgrade utility is being used. If this is not the case, you need to specify the data source name, database, database type, user ID, password, and table prefix for the database hosting the Object Repository of the system you want to upgrade. For this reason, it is recommended that you write down this information before starting the upgrade process. This information can be retrieved in the System Configuration Wizard.

Upgrading the older version on the production system

To upgrade the older version of Narrowcast Server on the production system

- 1 Launch the Narrowcast Server system upgrade utility from Narrowcast Administrator by selecting **Upgrade Narrowcast Server System** from the **Tools** menu.

The upgrade tool reads the registry for a currently registered system to upgrade. If a system is found, the prefix, database type, data source name, login ID, and password are populated automatically by the tool.

If no system is currently registered, or if you wish to upgrade a system other than the system currently registered, you must type the prefix, database type, data source name, login ID, password, and database (optional). This information corresponds to the Object Repository of the


system. The upgrade tool automatically upgrades the Subscription Book Repository associated with the supplied Object Repository.

- 2 By default, the **Commit changes incrementally** check box is selected. This option reduces the memory consumption of the machine that is being used for the upgrade.
- 3 Click **Upgrade** to begin the upgrade process. The upgraded information repositories are created and populated in the same database as your existing version information repositories.

Upgrading from MicroStrategy Narrowcast Server 8.x

The version of JVM that ships with MicroStrategy 9.0 does not support strong encryption. To enable strong encryption, the JVM on the Narrowcast Server machine must be updated. The steps below show you how to install a later version of JVM.


To install a later version of JVM

- 1 Download the Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files 1.4.2 from <http://java.sun.com/j2se/1.4.2/download.html> from the Other Downloads area of the page.
 README.txt is one of the files that is downloaded with the step above.
- 2 Follow the instructions in the README.txt file to install the jar files in `Program Files\Common Files\MicroStrategy\JRE\142_06\lib\security`.
- 3 Upgrade the Narrowcast Server repository. To do this, open the Configuration Wizard in Narrowcast Administrator. Select the **Configure multiple machines** option and then click through the clustering dialog boxes.

On larger and slower systems, the upgrade process can take four hours or more. Once the upgrade has started, information appears in the Upgrade

Summary section to outline the different steps being carried out. If an error is encountered during the process, the changes up to that point are rolled back to their original state.

If the upgrade process is successful, you are presented with an option to commit the changes made or to roll back the changes made. These changes do not impact your existing version 8.x system.

 If your system is clustered, you must review the setup for the Intelligence Server cluster in the Information Source Wizard after the upgrade is complete.

Modifying the upgraded production system to use production machines

Using the Narrowcast Server Export/Import tools, change the Distribution Manager, Execution Engine, and MicroStrategy Logging Server.

Merging changes from the testing system

Use Narrowcast Administrator's object management capabilities to migrate any required changes from the upgraded testing system to the production system.

Restarting the production system

The last step in the process of upgrading your production system is to restart the system. First, reboot each server to ensure that all configuration changes take effect. Then, using Narrowcast Administrator, start your system from the **System** menu.