OpenAmeos

Migrating to Ameos

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1 Before Starting Migration

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This document describes how to migrate Ameos and StP systems using the latest Ameos release. All systems created with versions of Ameos prior to StP version 8.3 must be migrated.

Before you begin to migrate your system, we recommend you read this chapter – namely:

- "Overview of the Migration Process" on page 5
- "System and Software Requirements" on page 8
- "Required Information" on page 9

Actual procedures for migrating are provided in Chapter 2, "Migrating Ameos Systems" on page 10 A sample migration log and error messages are provided in Appendix A, "Migration Error Messages" on page 17

Overview of the Migration Process

Migration is carried out by the Ameos migration wizard, which is invoked from the Ameos desktop via **Admin > Migrate Systems**. The migration process guides you through the process of converting one or more systems.

This section includes the following information:

- "What is Migrated?" (below)
- "Who Can Migrate Ameos Systems?" on page 7
- "Backing Up Source Files" on page 7
- "Migration Options" on page 7

Note: Migration from systems created with StP versions earlier than 2.6 is not supported by the Ameos migration wizard. To migrate these earlier systems to Ameos, you must first migrate them to StP 2.6. Contact Aonix Technical Support for details.

What is Migrated?

You can migrate a single system, or batch-migrate some or all of the Ameos systems within a project directory. Batch migration of multiple projects is not supported. Only entire systems can be migrated; you cannot migrate part of a system, such as individual diagrams, tables, or annotations.

The migration process migrates system flat files and then rebuilds the repository.

The source system and its repository server may reside on either a UNIX or Windows platform, provided it is accessible to the Ameos installation. If the repository server is not accessible, migration performance may be slower, particularly with large systems.

There are three aspects of Ameos migration:

- Migrating customizations and enhancements
- Migrating systems
- For reverse-engineered systems, creating a new semantic model

Migrating Customizations and Enhancements

Customizations and enhancements to Ameos systems should be tested with Ameos before system migration.

If your existing system includes customizations or enhancements, contact your Aonix AE (Applications Engineer) for assistance before migrating to Ameos.

System Migration

System migration is handled by the Ameos migration wizard, and includes:

- Copying and upgrading the source Ameos system ASCII files
- Re-creating the Ameos system repository for the migrated system from the system ASCII files and adding the system owner, writers, and readers from the old repository

The migrated Ameos system may either replace the source system or be placed in a new project directory. In either case, the system name remains the same.

The owner of the migrated system repository is the current user. If the original owner is not the current user, the original owner is added as a system writer.

Additional repository readers and writers are replicated from the source repository, if applicable.

For optimal speed and the most complete automated migration, the Ameos migration wizard must be able to connect directly to the Ameos source system repository, in order to:

- Migrate system flat files and rebuild the repository (the repository itself is not migrated).
- Replicate repository access rights for readers and writers on the migrated system.
- Obtain repository size information (for target Sybase databases only).

If the original Ameos repository no longer exists or is unreachable from the current host, the Ameos migration wizard will display a warning. However, the migration can still proceed.

Also, if the original repository is inaccessible, repository user permissions must be reset manually from the Ameos desktop, by **Admin > Manage Users > Add User(s)**. For more information on adding Sybase users, see Adding Sybase Repository Manager Users in the "Ameos Users" chapter of the *Ameos Administration Guide*.

If migrating to a Sybase database, the repository size is replicated from the original repository and, if necessary, expanded to meet Ameos requirements. If the original repository is not available, default values are used for the repository size. This might lead to error messages about the lack of space in the repository

If migrating to a Microsoft Jet database, the database "auto-grows," as necessary; its size is not dependent on access to the original repository.

Semantic Model for Reverse Engineered Systems

In addition to migrating the system files and repository, you need to create a new semantic model for any system that uses reverse engineering.

To create a semantic model for a migrated system, you reparse the original system's reverse engineering source code files, using the Ameos reverse engineering tool (see "Reparsing Source Code Files for Reverse Engineering" on page 16). This migrates the semantic model database to Ameos.

Note: The user doing the migration must have system creation privileges in the new repository. See Granting Sybase Users System Creation Privileges in the "Ameos Users" chapter of the *Ameos Administration Guide* for more information.

Who Can Migrate Ameos Systems?

To migrate Ameos systems, you must be one of the following:

- An Ameos administrator
- The owner of the systems to be migrated
- A user with read permission on an Ameos system that is to be migrated (but only if writing to a new project directory; see “Overwriting or Retaining the Source System” on page 7)

Please note that the user doing the migration must have privileges to create systems in the new repository. See Granting Sybase Users System Creation Privileges in the "Ameos Users" chapter of the *Ameos Administration Guide* for more information.

Backing Up Source Files

Before running the Ameos migration wizard, be sure to back up all the project/system directories and system repositories to be migrated.

For additional information on backing up source files, see Backup and Recovery in the "Administering Ameos" chapter of the *Ameos Administration Guide*.

Migration Options

The Ameos migration wizard allows you to choose:

- Whether to overwrite or retain the source Ameos system
- The type of database for the migrated system

Overwriting or Retaining the Source System

The migration procedure allows you to choose one of the following:

- Overwrite your existing systems with the migrated systems (“in place” migration).
- Retain the existing systems in their current location and place the migrated systems in a new project directory.

Retaining existing systems ensures the existence of working production systems during the migration process. Once migration is complete, the previous version’s system files and repositories can be removed or archived.

Choosing the Database Type

Depending on the migration options you choose, each system repository is converted to one of the following database types:

- Sybase
- Microsoft Jet

The Sybase database type is compatible with several versions of Microsoft Jet, Sybase SQL Server, and Sybase Adaptive Server Enterprise (Sybase ASE). To see the latest Ameos software compatibility requirements, refer to the "Software Compatibility" section of the *Release Notes* for Windows or for UNIX.

Note: The Microsoft Jet database engine is included with Windows releases.

Migrations that do not overwrite the source system(s) offer a choice of database type—Sybase or Microsoft Jet—and, for Sybase-managed systems, a choice of Sybase server. All “in place” migrations automatically retain the Sybase database type and existing Sybase server.

If you intend to use Microsoft Jet as the repository manager for a migrated system, you must place the migrated system in a different directory than that containing the existing Sybase-managed system.

System and Software Requirements

Before running the Ameos migration wizard, be sure that:

- Required software is installed on the appropriate machine.
- Adequate disk space is available on the target device.
- Source files and the target Ameos project directory are accessible to the computer running Ameos.

Required Software

The following software must be installed before migrating your system files and repositories to Ameos:

- Ameos, local Ameos customization files, if any, and the Ameos license manager must be accessible from the computer from which you are performing the migration.
- One of the repository managers listed below must be installed on your computer or on a computer-accessible network drive.

  - Sybase SQL Server

  - Sybase ASE

  - Microsoft Jet (automatically installed with Windows versions)

To see which versions of the above are supported with the current release, refer to the "Software Compatibility" section of the *Release Notes* for Windows or for UNIX.

Required Repository Space

The amount of repository space required for the migration depends on:

- The size of the existing system(s)
- Whether or not the migration overwrites the existing Ameos system(s)
- Increased repository space requirement for Ameos

There must be adequate disk space on the target device to hold all of the target system's ASCII files, temporary backup copies of the source system's ASCII files (if overwriting the source system), and the Ameos repository.

If you do not have enough space, you may get an error during migration stating that the repository or the repository log is full. The ToolInfo variables `syscreate_size` and `syscreate_log_size` control the size of the repository and the repository log, respectively. For information on these ToolInfo variables, refer to Customizing the User Environment in the "Administering Ameos" chapter of the *Ameos Administration Guide*.

Systems migrated from older versions of Ameos may require larger repositories to accommodate the migrated data. In some extreme circumstances the increase has been up to 100%. To ensure a successful migration, you should prepare for the largest increase possible. This applies only to migrations where Sybase is the target database. MS Jet databases expand automatically as more space is needed (up to the amount of available disk space).

Table 1 summarizes migration disk space requirements.

Table 1: Disk Space Required for Migrated System(s)

Files	Overwriting Source System(s)	Retaining Both Source and Target Systems
Ameos system ASCII files	Twice the space occupied by the source system ASCII files, to hold the new system files and temporary backup copies of the originals	Same amount of space occupied by the source system ASCII files
Ameos repository	*For systems earlier and including 8.0*: Up to 100% more disk space than the source system repository *For systems after and including 8.1*: Same space as the original system	

Note: Temporary files are removed when the migration is complete.

Source System and Target Directory Accessibility

Ameos source systems and the target project directory must reside on one of the following:

- The same computer as the Ameos installation
- A drive on a computer mapped to the computer with the Ameos installation

Depending on the available network services, this may require mapping one or more network drives, or copying files manually or through FTP.

Required Information

Make sure you have the following information available when you run the Ameos migration wizard:

- Source Ameos project directory and system name(s)
- Source system repository password (if it is not set in an environment or ToolInfo variable)
- Target Ameos project directory (if different from source directory)
- Database type for the target Ameos system repositories (Sybase or Microsoft Jet; not required for “in place” migrations)
- Sybase server for the target Ameos systems (for target systems with Sybase database types only; not required for “in place” migrations)

2 Migrating Ameos Systems

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This section explains how to migrate existing systems to the current Ameos release.

Before continuing with this section, read Chapter 1, “Before Starting Migration” on page 5 to understand the migration process and requirements.

This section includes:

- “Migrating Customizations and Enhancements” (below)
- “Migrating Existing Systems to Ameos” (below)
- “Reparsing Source Code Files for Reverse Engineering” on page 16
- “Updating Templates for ACD Code Generation” on page 16

Migrating Customizations and Enhancements

Customizations and enhancements to Ameos systems should be tested with Ameos before system migration.

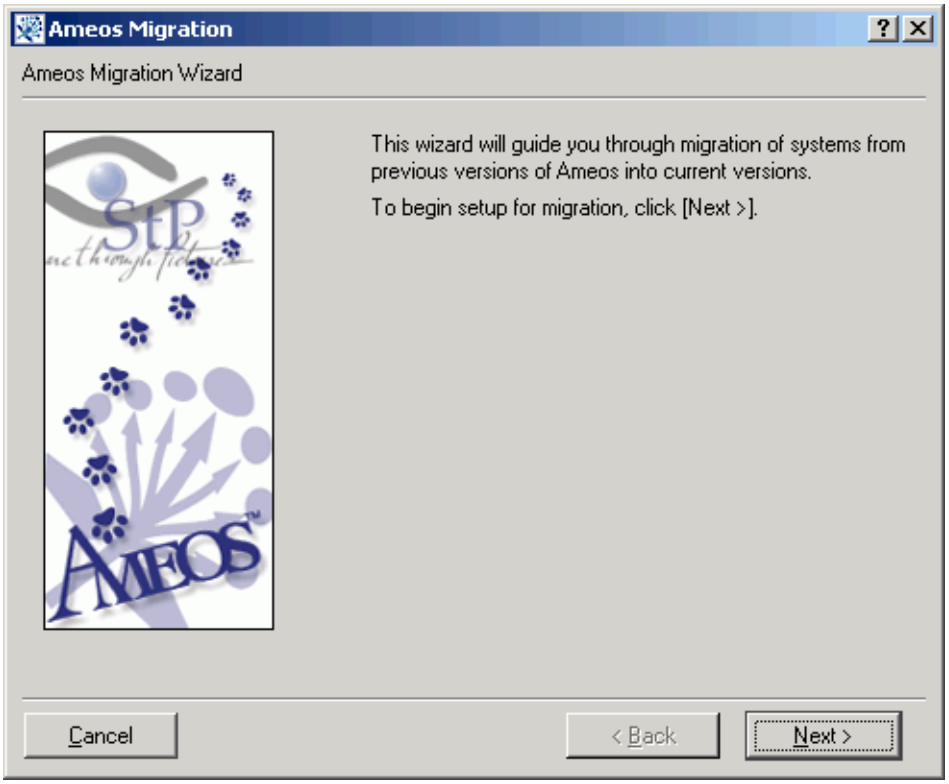
If your existing system includes customizations or enhancements, contact your Aonix AE (applications engineer) for assistance before migrating to Ameos.

User customizations and enhancements, if present, are located in <*old_installation_folder*>*templates*. User customizations are located in the *user* subdirectory.

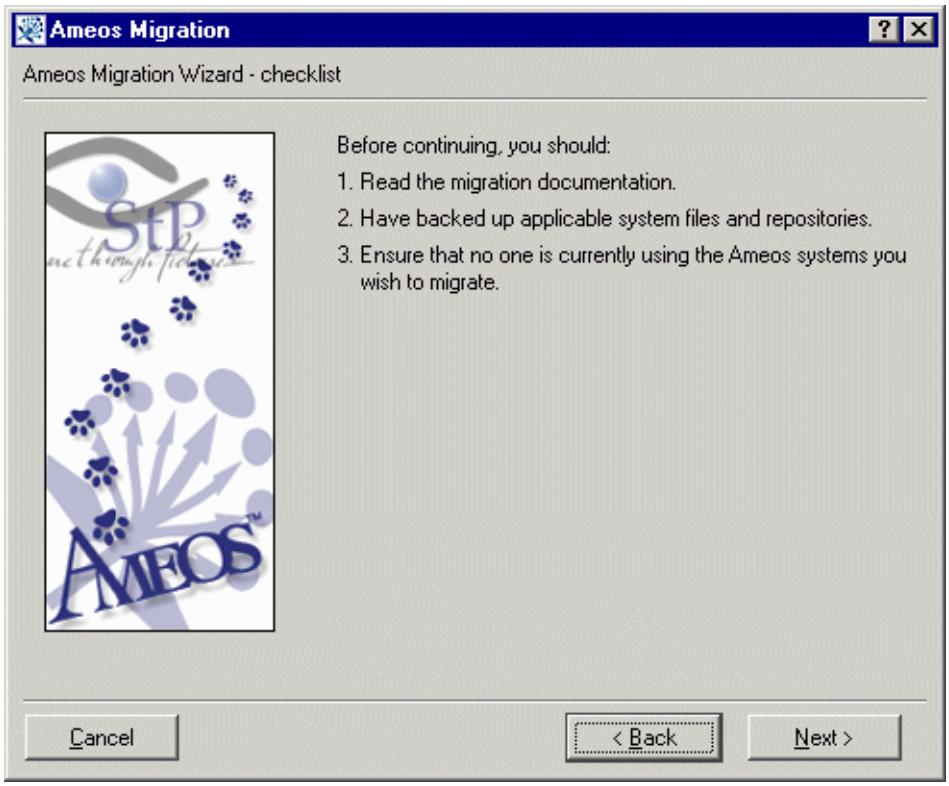
Migrating Existing Systems to Ameos

To migrate existing systems to Ameos:

1. Verify that you have met all the requirements described in “System and Software Requirements” on page 8 and “Required Information” on page 9.
2. Open the Ameos desktop.
3. From the **Admin** menu, choose **Migrate Systems**. The **Ameos Migration Wizard** screen appears.

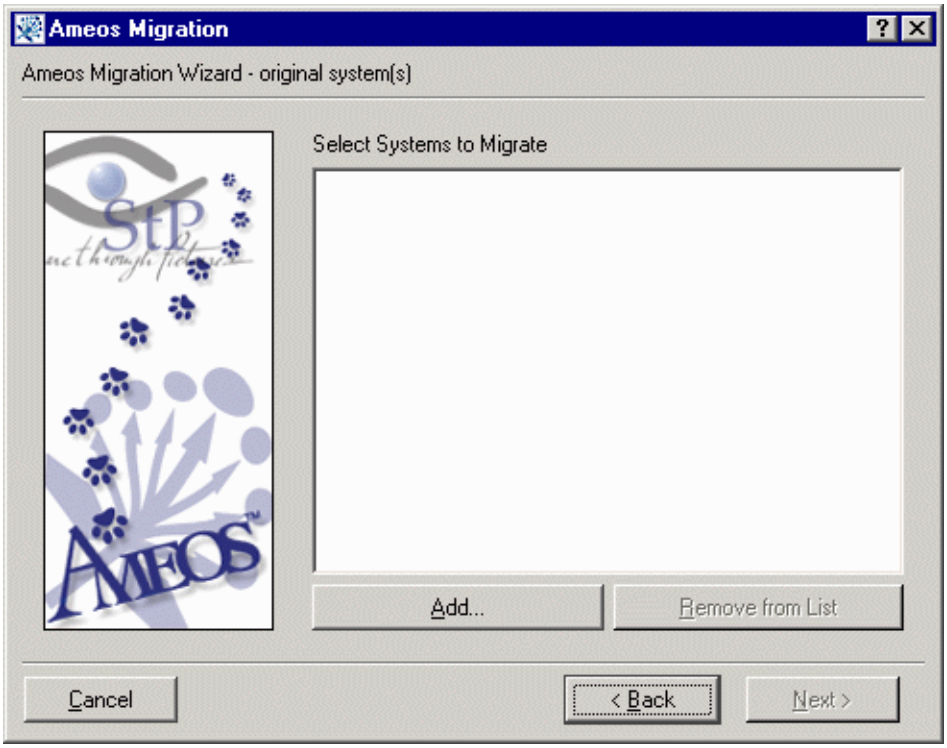


4. Click Next.
   The **checklist** wizard screen appears.



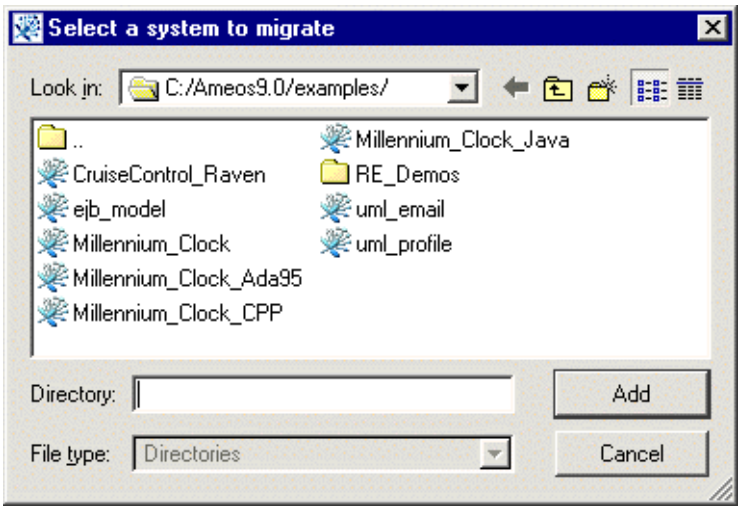
5. Complete each item on the checklist before continuing then click **Next**.

The **original system(s)** wizard screen appears.



6. Click the **Add** button.

   The **Select a system to migrate** dialog appears.



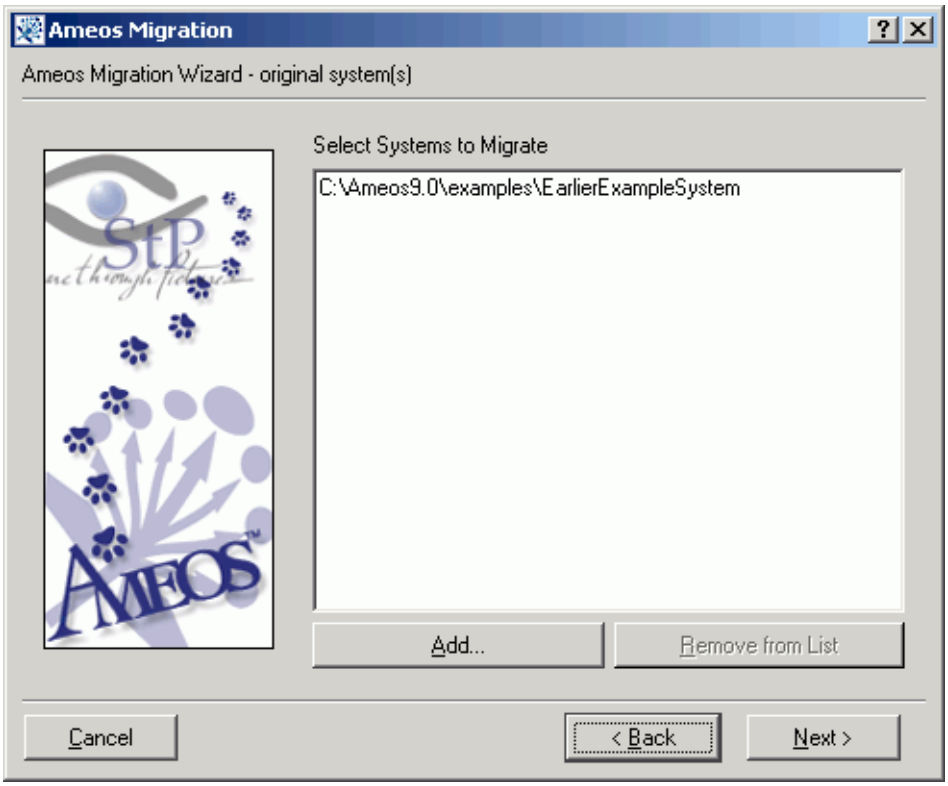
7. Navigate to the appropriate project, select the system to migrate, and click **Add**.

   The migration wizard checks for the existence of the system's repository.

   If a Sybase repository is found, and the Sybase password is not set in an environment or ToolInfo variable, a dialog appears asking for the password for the source Sybase server.

8. If prompted, enter the password and click **OK**.

The system is added to the **original system(s)** wizard screen.

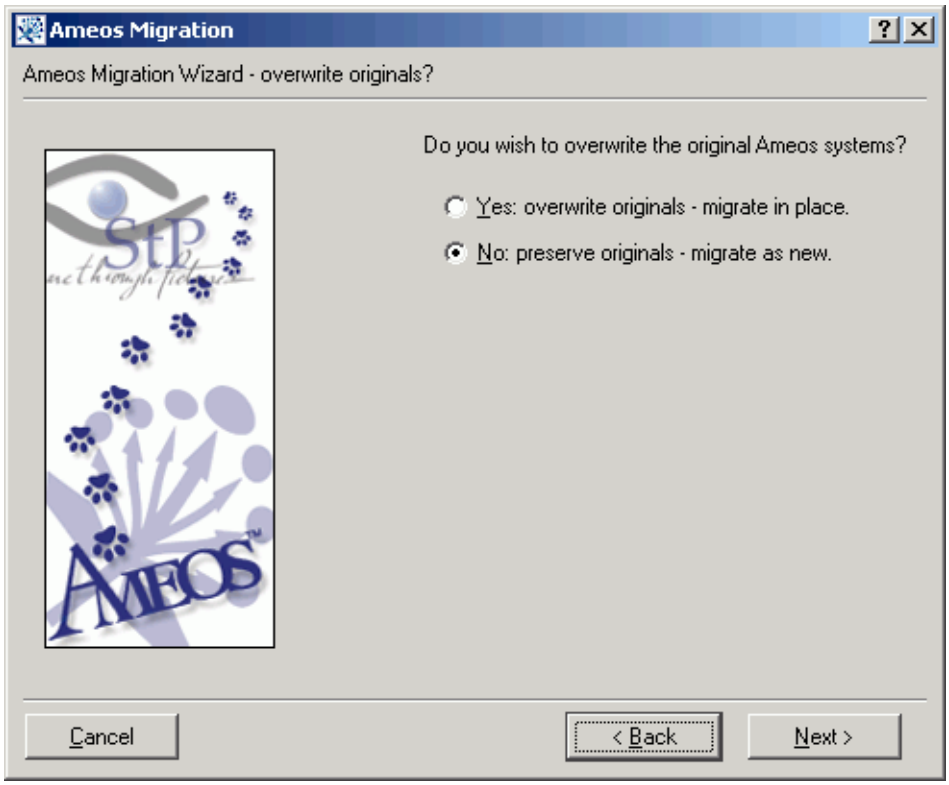


9. To migrate multiple systems within a single project, click **Add** again and repeat the steps to choose additional systems.

   Note: The migration wizard only migrates systems from a single project. If you have multiple projects, you must run the migration wizard separately for each project.

10. When you have added all the systems you want to migrate from a single project, click **Next**.

    The **overwrite originals?** wizard screen appears.



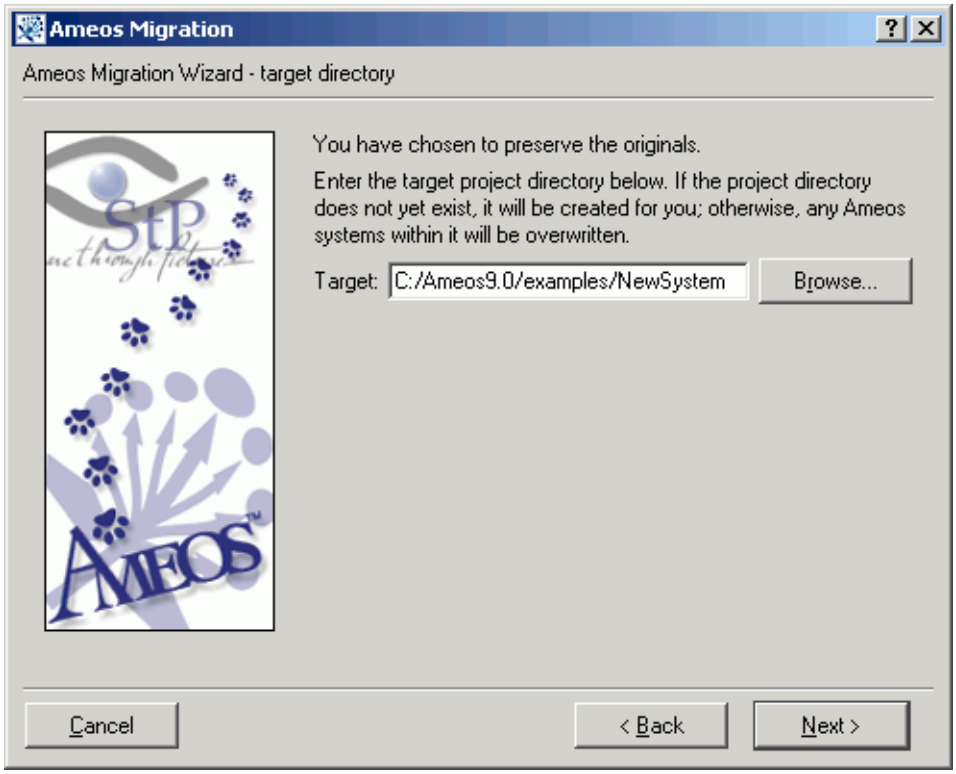
For systems listed in the **original system(s)** wizard screen, you have the option to migrate the systems in place or to a new location:

- If you migrate systems in place, temporary backup files are created and the original systems are overwritten, ultimately conserving disk space (consider this option carefully).
- If you migrate systems as new, additional disk space is required but you preserve a copy of each original system.

If you choose **Yes**, go to step Step 14 on page 15.

If you choose **No**, click **Next**.

The **target directory** wizard screen appears.

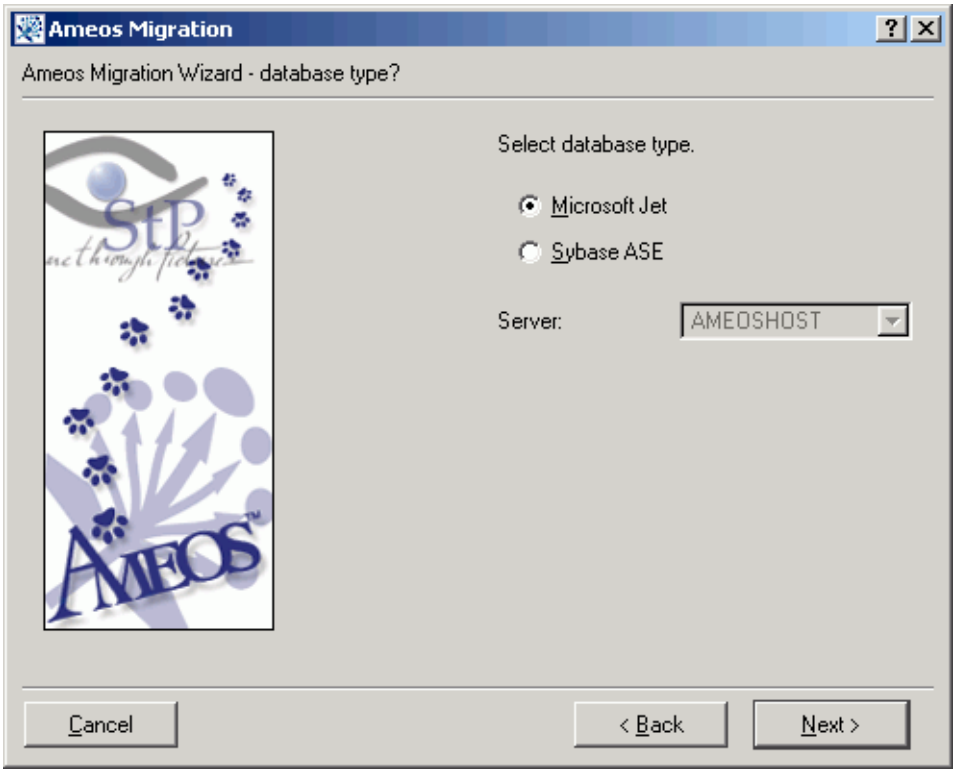


11. Enter the target project directory. If the folder name doesn't exist, Ameos automatically creates one.

    Alternatively, click **Browse** and select a directory.

12. Click **Next**.

    The **database type?** wizard screen appears.

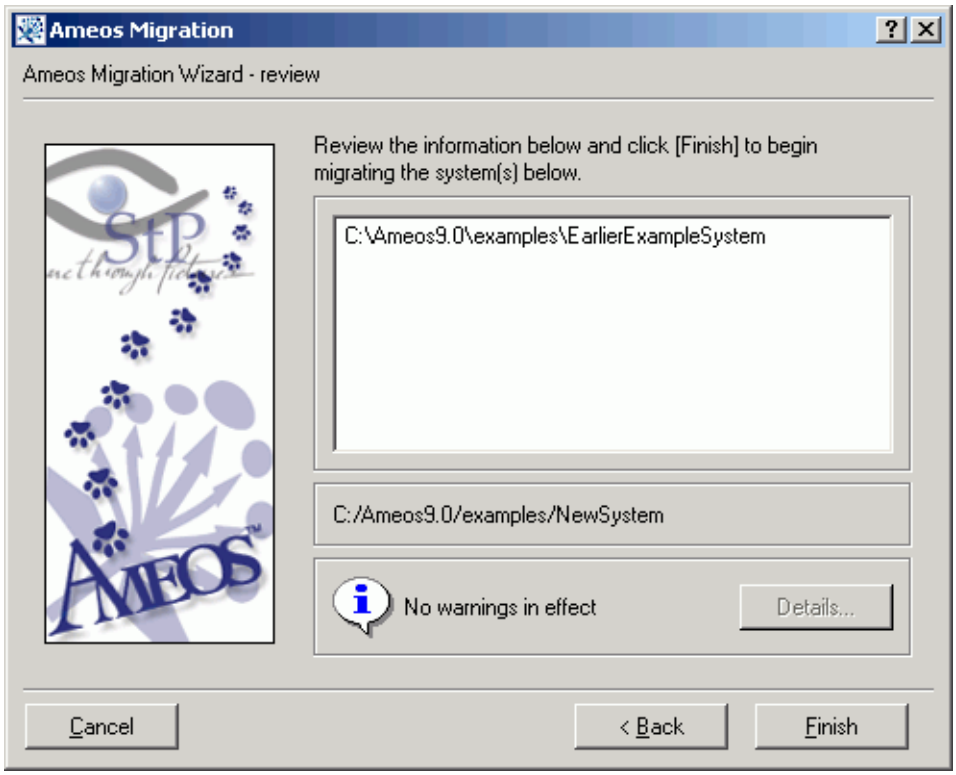


13. Choose the appropriate database.

    If you choose **Sybase SQL Server or Sybase Adaptive Server**, choose the target Sybase server name from the pull-down list.

14. Click **Next**.

    The **review** wizard screen appears.



15. Review the information displayed on the wizard screen.

If warnings are in effect, click **Details** to see an explanation of the warnings. Address the warnings if necessary.

16. Click **Finish** to migrate the listed systems.

    A dialog appears, displaying the status of the current migration.

    Note: If you need to stop the migration process after it begins, click **Cancel** on the dialog. If you are migrating in place, consider this option very carefully. If you cancel an in-place migration, the Ameos system repository may be permanently changed. Consequently, you should rebuild the source system repository before attempting to migrate the same system(s) again. See Backup and Recovery in the "Administering Ameos" chapter of the *Ameos Administration Guide* for more information.

    If you are migrating as new, and you cancel the migration, the original Ameos system is unchanged.

17. After the migration is complete, click **View Log** to view the log file.
18. Click **Close** to exit the migration.

Note: If you have problems with migration, check the "Problems During Installation and Migration" section of the *Release Notes*. That section contains information about various problems that might occur during migration, as well as workarounds for the problems.

Reparsing Source Code Files for Reverse Engineering

If you use reverse engineering in Ameos, you need to reparse your source code files. This migrates the semantic model database to Ameos.

To reparse your source code for an Ameos system, open the desktop then choose **Code > Reverse Engineering > Reverse Engineer** <*language*> **Code** to open the **Parse** <*language*> **Code** dialog. From there, you create a parse list and parse the files in the list. For a detailed description of the reverse engineering process, see the "Reverse Engineering" chapter in the *Advanced Modeling Concepts* document.

Updating Templates for ACD Code Generation

If you have customized your ACD templates in previous releases of Ameos, you may need to update them. To see the types of changes recently implemented for ACD that may affect your templates, refer to the "ACD Migration Changes" section in Appendix B in the *Release Notes*.

A Migration Error Messages

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This appendix provides a description and recommended action for several common error messages that may occur during a migration.

Message: system busy; administration in progress

Problem: The migration failed due to repository operation errors. This is indicated by the *.sysbusy* file remaining in the root directory of the source system. Migration cannot proceed.

Recommended action: Remove the *.sysbusy* file.

Message 10005: Unable to locate server in sybase interfaces file

Problem: The server specified in the *.repinfo* for a system to be migrated is not reachable.

Recommended action: Configure Sybase on the target platform to find the server.

Message: missing .repinfo - cannot overwrite

Problem: The source system does not have a managed repository, such as Sybase or MS Jet. This is indicated by a missing *.repinfo* file. All systems migrated in place must have a managed repository.

Recommended action: Either rebuild the source system repository prior to migration, or instead of overwriting, specify a target project directory, database type and (if applicable) database server.

Message: cannot create repository lock file

Problem: A repository lock file (*.sysbusy*) cannot be created in the source system directory. Most likely the system directory does not grant write permission to the current user.

Recommended sction: Change permission settings on the source system directory, or perform the migration as a user who is allowed write access in that directory.

Message: failure copying {filename}

Problem: If you are migrating from UNIX to Windows, and you have filenames that differ only by uppercase and lowercase characters, this message may indicate a naming conflict. UNIX filenames are case-sensitive; Windows file names are case-insensitive.

For example, if you have three diagrams, *case*, *CASE*, and *Case*, one diagram is copied successfully, such as *case*, but the other two result in error messages:

```
Message : Copied 'case.uclassd'.
Message : Filesystem naming clash on 'CASE.uclassd'.
Message : Failed to copy 'CASE.uclassd'.
Message : Filesystem naming clash on 'Case.uclassd'.
Message : Failed to copy 'Case.uclassd'.
Message : failure copying
X:/projects-2.6/Migration/uclassd_files/CASE.uclassd
Message : failure copying
X:/projects-2.6/Migration/uclassd_files/Case.uclassd
```

Recommended action: Using the earlier version of Ameos, rename diagrams or tables to eliminate the case-insensitive namespace collision, and then migrate the system.

Alternatively, rename the diagram or table files manually, remove the *.repinfo* file, which forces the migration to use the traditional rebuild mechanism (a slower process), and then migrate the system.