Enterprise Architect

User Guide Series

Server Based Repositories

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Server Based Repositories

As a repository becomes larger, or the number of concurrent users increases or organizational policy dictates, it might be more appropriate to use a database management system (DBMS) to store the repository. A File Based Repository can be created and used in any edition of Enterprise Architect; however, if you decide to use a DBMS based repository you will need to use the Corporate, Unified or Ultimate editions. Enterprise Architect has a function to transfer your repository from a file based repository to a server based one, helping you to get started quickly and with no changes in the user-interface.

Note that the performance of the Repository as experienced by end users will depend very much on the quality and power of the server machine and the network infrastructure on which the DBMS and user are located. Using a DBMS over a very high latency (10ms or higher) network can result in significant delays and visibly inferior performance. When network latency is an issue, Sparx Systems recommends using a Cloud Based Server as the interactions are optimized to reduce the effect of network latency.

Also it is important to note that all models are quite different and although Sparx Systems does its best to maximize performance based on what is expected to be held in a repository, sometimes this is not quite sufficient. In these rare cases a review of the database indexes would be good practice to maximize data retrieval and access. This will ensure that end users receive the best possible performance even when models contain millions of constructs.

Set up a Project on a DBMS repository

To set up your project on a DBMS repository, you work through these stages:

1. Set up your DBMS software and create a repository.
2. Create the required tables in your repository, by running a script supplied on the Sparx Systems website.
3. (For certain DBMS products) Set up an ODBC driver to enable connection to the repository.
4. Transfer the project from the source file to the DBMS repository; the source file can be:
   - a .EAP or .FEAP base model, to begin a new project from scratch, or
   - a previously-developed project file, to move an existing project into the DBMS repository
5. Connect to your repository.

DBMS Products you can use

You can set up your project on a repository in:

- Firebird from v2
- MySQL from v5
- MariaDB
- Microsoft SQL Server from 2005, all editions including Express and Azure
- Microsoft Access from 2007
- Oracle from 9i (all editions)
- PostgreSQL from v8
- Sybase Adaptive Server Anywhere 8 or 9, or SQL Anywhere 10, 11 or 12

For information on creating a project on a specific DBMS from this list, see *Learn more*.

Notes

- You cannot move a model from a source .eap file of an Enterprise Architect version earlier than 3.5.0 without updating it first
- Before proceeding, you must have MDAC 2.6 or higher installed on your system
- (Optional, but recommended) before actually transferring the project structure from the file to the repository, perform a Project Data Integrity Check on the file

Create a Project in a MariaDB Database

To create a project in a repository on MariaDB, you work through these stages:

- Stage 1: Create an empty database repository and set up the data tables
- Stage 2: Set up the ODBC Driver
- Stage 3: Perform a project integrity check on the project file you are using as a base (optional, but recommended)
- Stage 4: Transfer the data
- Stage 5: Connect to the repository and open the project

Prerequisites

- A machine with MariaDB version 10.1.2 or higher installed and running,
- MySQL ODBC

Create a MariaDB Repository

Create the repository as outlined here.

Step	Action
1	Create a new empty database and configure it to your installation's defaults.
2	Load the EASchema_1220_MySQL.sql file from the Sparx Systems website into your SQL management console of choice (such as HeidiSQL).
3	Run the script to create the required database schema.

Set Up the ODBC DSN

Step	Action
1	Create a suitable ODBC Data Source (using the MySQL ODBC driver and NOT the MariaDB driver), to point to your new database. Select the extended option: • 'Return matched rows instead of affected rows'

Perform a Project Integrity Check

Step	Action
1	In Enterprise Architect, open the file-based project or template from which you are creating the project on

	the repository.
2	Select and execute the 'Configure > Model > Integrity Check > Project Integrity' ribbon option. This ensures your project data is 'clean' and free from errors before being copied to the repository.

Transfer the Project Data

Step	Action
1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select 'File to DBMS'.
4	In the 'Source Project' field, click on the button and browse for the name of the project file to copy to the repository. If the .EAP file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the button. The 'Datalink Properties' dialog displays.
6	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list. Click on the Next button.
7	In the 'Use Data source name' field, click on the drop-down arrow and select the ODBC Data Source you configured to point to your new database. Click on the OK button. The 'Project Transfer' dialog redisplays.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process.
10	When the process is complete, you have created a project on a MariaDB database and can now connect to it and open it from Enterprise Architect.

Create a MariaDB Repository

Creating a MariaDB database is fully documented in the product information provided with your MariaDB installer.

Having created your MariaDB database, use the SQL script provided by Sparx Systems to create the required table definitions for Enterprise Architect.

You can obtain the scripts from the Sparx Systems website, on the:

- Registered Corporate edition 'Resources' page (Registered users)
- Corporate edition 'Resources' page (Trial users)

Third Party Tools

If you are unfamiliar with MariaDB and DBMS systems in general, you might want to consider a suitable front end tool. HeidiSQL is installed with MariaDB, providing a convenient graphical user interface to enable the creation of databases, the execution of scripts, and backups and restores.

You might, therefore:

1. Run HeidiSQL and create a new database

After creating a MariaDB data repository in Enterprise Architect, you must set up the MariaDB ODBC driver.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- Ensure that the collation is set to the alphabet you use, such as Latin or Cyrillic

Set up a MariaDB ODBC Driver

After you have created a MariaDB database, you will need to setup an ODBC DSN to the new database in order for Enterprise Architect to connect to it. However Sparx Systems recommend that the MySQL ODBC driver is used to connect to MariaDB based repositories as the native MariaDB ODBC driver is not fully compatible with connection methods employed by Enterprise Architect.

Prerequisites

Install:

- MariaDB DBMS and repository
- MySQL ODBC driver software

Set up the ODBC Driver

Step	Action
1	Under both 32-bit and 64-bit operating systems, Enterprise Architect requires 32-bit ODBC drivers to connect to a repository through ODBC. You can quickly load the correct 32-bit ODBC Data Source Administrator by selecting the 'Configure > User Tools > ODBC Data Sources' ribbon option. The ODBC Data Source Administrator window displays.
2	Click on the Add button. The 'Create New Data Source' dialog displays, enabling you to add a new DSN.
3	Select the appropriate MySQL ODBC Driver from the list.
4	Click on the Finish button. The 'MySQL Connector/ODBC' dialog displays.
5	Enter these configuration details: • A data source name for the connection • A description (optional) • The host address of the DBMS server • User name and password • The database name on the selected server
6	To set the advanced options, click on the Details>> button.
7	Select these checkboxes (where provided): • Return matched rows instead of affected rows ('Connection' or 'Cursors/Results' tab) • Allow big result sets ('Connection' tab)
8	Click on the Test Connection button to confirm that the details are correct.
9	If the test succeeds, click on the OK button to complete the configuration.

	If the test does not succeed, review your settings.

Connect to a MariaDB Data Repository

To access a project in your MariaDB data repository, you must connect to the data repository from Enterprise Architect.

Prerequisites

- The MariaDB repository and the project already exist
- You have SELECT, INSERT, UPDATE, DELETE, EXECUTE and SHOW VIEW access permissions
- The MariaDB ODBC driver has been set up

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to the repository

Step	Action
1	In the 'Open Project' dialog, select the 'Connect to Server' checkbox.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list.
4	Click on the Next>> button. The 'Connection' tab displays.
5	Click on the 'Use data source name' radio button and on the drop-down arrow in its field. From the list, select the ODBC driver you have set up to connect to your MariaDB repository.
6	If required, type in a User name and Password.
7	If required, type in an initial catalog.
8	Click on the Test Connection button to confirm that the details are correct.
9	If the test does not succeed, revise your settings. If the test succeeds, click on the OK button; the 'Connection Name & Type' dialog displays.

10	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.
11	If required, select the 'Encrypt Connection String' checkbox. This encrypts and hides the connection details of the database from the users that the connection string is given to.
12	If required, select the 'Lazy Load' checkbox to not load the full project view when the model is loaded; instead, only the parts that are necessary to display the visible portion of the tree are loaded. With this setting, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model.
13	If required, select the 'Use WAN Optimization' checkbox. To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you select this checkbox, complete the next three fields (see your administrator for the correct values); otherwise go to step 17.
14	In the 'Server' field, type the network name or address of the optimizer server.
15	In the 'Port' field, type the port on which the server is running on the remote machine.
16	In the 'DSN' field, type the data source name of the database as it appears on the remote machine.
17	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the 'Start Page'; from now on, you can open the project again just by clicking on this name.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions of Enterprise Architect

Create a Project in a MySQL Database

To create a project in a repository on MySQL 5, you work through these stages:

- Stage 1: Create an empty database repository and set up the data tables
- Stage 2: Set up the ODBC Driver
- Stage 3: Perform a project integrity check on the project file you are using as a base (optional, but recommended)
- Stage 4: Transfer the data
- Stage 5: Connect to the repository and open the project

Prerequisites

- A machine with MySQL version 5 or higher installed and running,
- MySQL 32bit ODBC driver, between versions 5.2.4 and 5.3.6 (other versions are not recommended)

Create a MySQL Repository

MySQL supports two different storage engines - InnoDB and MyISAM. In older versions of MySQL MyISAM was the default storage engine, but from MySQL v5.5 onwards InnoDB is the default. As of Enterprise Architect v13, Sparx Systems will no longer provide updates to the MyISAM script and recommend all users to choose InnoDB, as it supports transactions and UTF8.

Step	Action
1	Create a new empty database and configure it to your installation's defaults.
2	Load the EASchema_1220_MySQL.sql file from the Sparx Systems website into your SQL management console of choice (such as MySQL Workbench).
3	Run the script to create the required database schema.

Set Up the ODBC DSN

Step	Action
1	Create a suitable ODBC Data Source to point to your new database. Select these extended options: • 'Return matched rows instead of affected rows' • 'Allow big result sets'

Perform a Project Integrity Check

Step	Action
1	In Enterprise Architect, open the file-based project or template from which you are creating the project on the repository.
2	Select and execute the 'Configure > Model > Integrity Check > Project Integrity' ribbon option. This ensures your project data is 'clean' and free from errors before being copied to the repository.

Transfer the Project Data

Step	Action
1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select 'File to DBMS'.
4	In the 'Source Project' field, click on the ... button and browse for the name of the project file to copy to the repository. If the .EAP file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the ... button. The 'Datalink Properties' dialog displays.
6	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list. Click on the Next button.
7	In the 'Use Data source name' field, click on the drop-down arrow and select the ODBC Data Source you configured to point to your new database. Click on the OK button. The 'Project Transfer' dialog redisplays.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process.
10	When the process is complete, you have created a project on a MySQL database and can now connect to it and open it from Enterprise Architect.

Create a MySQL Repository

Creating a MySQL database is fully documented in the product information provided with your MySQL installer.

Having created your MySQL database, use the SQL script provided by Sparx Systems to create the required table definitions for Enterprise Architect.

You can obtain the scripts from the Sparx Systems website, on the:

- Registered Corporate edition 'Resources' page (Registered users)
- Corporate edition 'Resources' page (Trial users)

Third Party Tools

If you are unfamiliar with MySQL and DBMS systems in general, you might want to consider a suitable front end tool. MySQL Administrator is one such tool, providing a convenient graphical user interface to enable the creation of databases, the execution of scripts, and backups and restores.

You might, therefore:

1. Run MySQL Administrator and create a new database, then
2. Run MySQL Query Browser, and open and execute the MySQL repository script

After creating a MySQL data repository in Enterprise Architect, you must set up the MySQL ODBC driver.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- Ensure that the collation is set to the alphabet you use, such as Latin or Cyrillic

Set up a MySQL ODBC Driver

After you have created a MySQL database, you will need to setup an ODBC DSN to the new database in order for Enterprise Architect to connect to it.

Prerequisites

Install:

- MySQL DBMS and repository
- MySQL 32bit ODBC driver, between versions 5.2.4 and 5.3.6

Set up the ODBC Driver

Your MySQL driver is now available to connect to the repository from Enterprise Architect.

Step	Action
1	Under both 32-bit and 64-bit operating systems, Enterprise Architect requires 32-bit ODBC drivers to connect to a repository through ODBC. You can quickly load the correct 32-bit ODBC Data Source Administrator by selecting the 'Configure > User Tools > ODBC Data Sources' ribbon option. The ODBC Data Source Administrator window displays.
2	Click on the Add button. The 'Create New Data Source' dialog displays, enabling you to add a new DSN.
3	Select the appropriate MySQL ODBC Driver from the list.
4	Click on the Finish button. The 'MySQL Connector/ODBC' dialog displays.
5	Enter these configuration details: • A data source name for the connection • A description (optional) • The host address of the DBMS server • User name and password • The database name on the selected server
6	To set the advanced options, click on the Details>> button.
7	Select these checkboxes (where provided): • Return matched rows instead of affected rows ('Connection' or 'Cursors/Results' tab) • Allow big result sets ('Connection' tab)
8	Click on the Test Connection button to confirm that the details are correct.
9	If the test succeeds, click on the OK button to complete the configuration. If the test does not succeed, review your settings.

Connect to a MySQL Data Repository

To access a project in your MySQL data repository, you must connect to the data repository from Enterprise Architect.

Prerequisites

- The MySQL repository and the project already exist
- You have SELECT, INSERT, UPDATE, DELETE, EXECUTE and SHOW VIEW access permissions
- The MySQL ODBC driver has been set up

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to the repository

Step	Action
1	In the 'Open Project' dialog, select the 'Connect to Server' checkbox.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list.
4	Click on the Next>> button. The 'Connection' tab displays.
5	Click on the 'Use data source name' radio button and on the drop-down arrow in its field. From the list, select the ODBC driver you have set up to connect to your MySQL repository.
6	If required, type in a User name and Password.
7	If required, type in an initial catalog.
8	Click on the Test Connection button to confirm that the details are correct.
9	If the test does not succeed, revise your settings. If the test succeeds, click on the OK button; the 'Connection Name & Type' dialog displays.

10	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.
11	If required, select the 'Encrypt Connection String' checkbox. This encrypts and hides the connection details of the database from the users that the connection string is given to.
12	If required, select the 'Lazy Load' checkbox to not load the full project view when the model is loaded; instead, only the parts that are necessary to display the visible portion of the tree are loaded. With this setting, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model.
13	If required, select the 'Use WAN Optimization' checkbox. To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you select this checkbox, complete the next three fields (see your administrator for the correct values); otherwise go to step 17.
14	In the 'Server' field, type the network name or address of the optimizer server.
15	In the 'Port' field, type the port on which the server is running on the remote machine.
16	In the 'DSN' field, type the data source name of the database as it appears on the remote machine.
17	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the Start Page; from now on, you can open the project again just by clicking on this name.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions of Enterprise Architect

Create a Project in an Oracle Database

To create a project in a repository on Oracle 9i, 10g, 11g or 12c, you work through these stages:

- Stage 1: Create an empty database repository and set up the data tables
- Stage 2: Connect to the Oracle repository; Sparx Systems recommends using Oracle Provider for OLE DB - connecting with either Microsoft OLE DB Provider for ODBC or Microsoft OLE DB Provider for Oracle could cause unexpected behavior or performance issues due to known limitations of those drivers
- Stage 3: Perform a project integrity check on the project file you are using as a base (optional, but recommended)
- Stage 4: Transfer the data
- Stage 5: Connect to the repository to open the project

Prerequisites

- A machine with Oracle 9i, 10g or 11 g installed and running
- Oracle Client installed on the client machine, please ensure that the OLE/DB drivers are installed (you can download the drivers from the Oracle Technology Network web site, as part of the Oracle Data Access Components (ODAC) package; see *Learn more*)

Create Database Repository

Step	Action
1	Create the empty database.
2	Load the EASchema_1220_Oracle.sql file from the Sparx Systems website into your SQL management console of choice (such as Oracle SQL Developer).
3	Run the script to create the required database schema.

Perform Project Integrity Check

Step	Action
1	Open the file-based project or template.
2	Select and execute the 'Configure > Model > Integrity Check > Project Integrity' ribbon option. This ensures your project data is 'clean' before uploading.

Transfer the project data to the repository

Step	Action
1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select 'File to DBMS'.
4	At the right of the 'Source Project' field, click on the button and browse for the name of the project file to copy to Oracle. If the file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the button. The 'Datalink Properties' dialog displays.
6	Select 'Oracle Provider for OLE DB' from the list. Click on the Next button.
7	On the 'Connection' page of the 'Datalink Properties' dialog, enter the Oracle service name in the 'Data Source' field, and the user name and password as required. Click on the OK button. The 'Project Transfer' dialog redisplays.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process.
10	When the process is complete, you have created a project on a Oracle database and can now connect to it and open it from Enterprise Architect.

Notes

- When transferring a project to Oracle you must have access rights to execute the CREATE SEQUENCE command

Create an Oracle Data Repository

Creating an Oracle database is fully documented in the product information provided with your Oracle installer.

Before creating an Oracle data repository, install the appropriate version of Oracle (9i, 10g, 11g or 12c) and MDAC 2.6 or higher, and obtain access permission to create a new database.

Having created your Oracle database, use the SQL script (Oracle_EASchema.sql) provided by Sparx Systems to create the required table definitions and indexes for Enterprise Architect. You can obtain the script from the Sparx Systems website, on the:

- Registered Corporate edition 'Resources' page (Registered users), or
- Corporate edition 'Resources' page (Trial users)

When you eventually connect to the Oracle database from Enterprise Architect, Sparx Systems recommends using Oracle Provider for OLE DB. Connecting with either Microsoft OLE DB Provider for ODBC or Microsoft OLE DB Provider for Oracle could cause unexpected behavior or performance issues due to known limitations of those drivers.

Third Party Tools

If you are unfamiliar with Oracle and DBMS systems in general, you might want to consider a suitable front end tool. You could connect to the database and execute the scripts with a program such as Oracle SQL*Plus or SQL Plus Worksheet.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- The OLE DB client must be the 32-bit version
- Set the collation to the alphabet you use, such as Latin or Cyrillic

Set up an Oracle ODBC Driver

After you have created an Oracle database, you can either setup an ODBC DSN to the new database in order for Enterprise Architect to connect to it or you configure Enterprise Architect to use the Oracle OLE DB provider in connection strings to the new database.

Note that Sparx Systems recommends using Oracle Provider for OLE DB. Connecting with either Microsoft OLE DB Provider for ODBC or Microsoft OLE DB Provider for Oracle could cause unexpected behavior or performance issues due to known limitations of those drivers.

Prerequisites

Install:

- Oracle DBMS and repository

Set up the Oracle ODBC driver

Your Oracle driver is now available to connect to the repository from Enterprise Architect.

Step	Action
1	Under both 32-bit and 64-bit operating systems, Enterprise Architect requires 32-bit ODBC drivers to connect to a repository through ODBC. You can quickly load the correct 32-bit ODBC Data Source Administrator by selecting the 'Configure > User Tools > ODBC Data Sources' ribbon option. The ODBC Data Source Administrator window displays.
2	Click on the Add button. The 'Create New Data Source' dialog displays, enabling you to add a new DSN.
3	Select 'Oracle in OraDB11g_home1' from the list (or similar, depending on the ODBC installation).
4	Click on the Finish button. The 'Oracle ODBC Driver Configuration' dialog displays.
5	Enter these configuration details: • A data source name for the connection • A description (optional) • The TNS Service Name (click on the drop down arrow and select from the list) • User ID
6	Click on the Test Connection button and enter the Oracle user password to confirm that the details are correct.
7	If the test succeeds, click on the OK button to complete the configuration. If the test does not succeed, review your settings.

Connect to an Oracle Data Repository (ODBC)

To access a project in your Oracle 9i, 10g, 11g or 12c data repository, you connect to the data repository from Enterprise Architect.

Note that Sparx Systems recommends using Oracle Provider for OLE DB (see *Connect to an Oracle Data Repository (OLE DB)*). Connecting with either Microsoft OLE DB Provider for ODBC or Microsoft OLE DB Provider for Oracle could cause unexpected behavior or performance issues due to known limitations of those drivers.

Prerequisites

- The Oracle repository and the project already exist
- You have SELECT, UPDATE, INSERT and DELETE access permissions
- The Oracle ODBC driver has been set up

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to an Oracle Data Repository using an ODBC Driver

Step	Action
1	In the 'Open Project' dialog, select the 'Connect to Server' checkbox.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list.
4	Click on the Next>> button. The 'Connection' tab displays.
5	In the 'Data source' field, click on the drop-down arrow and select the data source name.
6	Type in the User name and Password.
7	Click on the Test Connection button to confirm that the details are correct.
8	If the test does not succeed, revise your settings. If the test succeeds, click on the OK button; Oracle prompts you for the password.

9	Type in the password. The 'Connection Name and Type' dialog displays.
10	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.
11	If you want to encrypt and hide the connection details of the database from the users that the connection string is given to, select the 'Encrypt Connection String' checkbox.
12	The Lazy Load facility does not load the full project view when the model is loaded; instead, it loads only the parts that are necessary to display the visible portion of the tree. With this set, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model. If you want to use the Lazy load facility, select the 'Lazy Load' checkbox.
13	To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you are using a WAN, and want to apply this facility, select the 'Use WAN Optimization' checkbox; otherwise go to step 16. If you select this checkbox, complete the next two fields (see your administrator for the correct values).
14	In the 'Server' field, type the network name or address of the optimizer server.
15	In the 'Port' field, type the port on which the server is running on the remote machine.
16	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the Start Page; from now on, you can open the project again just by clicking on this name.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions

Connect to an Oracle Data Repository (OLE DB)

To access a project in your Oracle 9i, 10g, 11g or 12c data repository, you connect to the data repository from Enterprise Architect.

Prerequisites

- Oracle Client already installed on the client machine, please ensure that the OLE/DB drivers are installed (you can download the drivers from the Oracle Technology Network web site, as part of the Oracle Data Access Components (ODAC) package; see *Learn more*)
- The Oracle repository and the project already exist
- You have SELECT, UPDATE, INSERT and DELETE access permissions

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to an Oracle Repository using OLE DB

Step	Action
1	In the 'Open Project' dialog, select the 'Connect to Server' checkbox.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Oracle Provider for OLE DB' from the list. **Do not** select 'Microsoft OLE DB Provider for Oracle'; Enterprise Architect might not work as expected.
4	Click on the Next>> button. The 'Connection' tab displays.
5	In the 'Data source' field, click on the drop-down arrow and select the data source name (the service name of the Oracle database).
6	Type in the User name and Password.
7	Click on the Test Connection button to confirm that the details are correct.
8	If the test does not succeed, revise your settings.

	If the test succeeds, click on the OK button; the 'Connection Name and Type' dialog displays.
9	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.
10	If you want to encrypt and hide the connection details of the database from the users that the connection string is given to, select the 'Encrypt Connection String' checkbox.
11	If required, select the 'Lazy Load' checkbox to not load the full project view when the model is loaded; instead, only the parts that are necessary to display the visible portion of the tree are loaded. With this setting, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model.
12	To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you are using a WAN, and want to apply this facility, select the 'Use WAN Optimization' checkbox; otherwise go to step 15. If you select this checkbox, complete the next two fields (see your administrator for the correct values).
13	In the 'Server' field, type the network name or address of the optimizer server.
14	In the 'Port' field, type the port on which the server is running on the remote machine.
15	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the Start Page; from now on, you can open the project again just by clicking on this name.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions

Create a Project in a PostgreSQL Database

To create a project in a repository on PostgreSQL, you work through these stages:

- Stage 1: Create an empty database repository and set up the data tables
- Stage 2: Set up the PostgreSQL ODBC Driver
- Stage 3: Perform a project integrity check on the project file you are using as a base (optional, but recommended)
- Stage 4: Transfer the data
- Stage 5: Connect to the repository to open the project

Prerequisites

- A machine with PostgreSQL 9 or higher installed and running
- psqlODBC, version 8.03 or higher has been installed (do not use version 8.3.4 or 8.4.1)

Create Database Repository

Step	Action
1	Create the empty database.
2	Load the EASchema_PostgreSQL_1220.sql file from the Sparx Systems website into your SQL management console of choice (such as pgAdminIII).
3	Run the script to create the required database schema.

Set Up the ODBC DSN

Step	Action
1	Create a suitable ODBC Data Source to point to your new database. Select these extended options: Page 1: Disable Genetic Optimizer - **Uncheck** Use Declare/Fetch - **Check** Unknowns as LongVarChar - **Check** Bools as Char - **Uncheck** Max Varchar - **1024** Max LongVarChar - **1000000** Page 2:

	bytea as LO - **Check** Disallow Premature - **Check** Protocol - **7.4+**

Perform a Project Integrity Check

Step	Action
1	In Enterprise Architect, open the file-based project or template from which you are creating the project on the repository.
2	Select and run the 'Configure > Model > Integrity Check > Project Integrity' ribbon option. This ensures your project data is 'clean' before being copied to the repository.

Transfer the project data to the repository

Step	Action
1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select 'File to DBMS'.
4	In the 'Source Project' field, click on the ... button and browse for the name of the project file to copy to the repository. If the .EAP file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the ... button. The 'Datalink Properties' dialog displays.
6	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list. Click on the Next button.
7	On the 'Use Data Source Name' field, click on the drop-down arrow and select the ODBC Data Source you configured to point to your new database. Click on the OK button. The 'Project Transfer' dialog redisplays.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process.

10	When the process is complete, you have created a project on a PostgreSQL database and can now connect to it and open it from Enterprise Architect.

Notes

- During the transfer, if an error message displays reporting '...nonstandard use of \\ in a string literal...', set the server variable in the postgresql.conf file to: escape_string_warning = off

Create a PostgreSQL Repository

Creating a PostgreSQL database is fully documented in the product information provided with your PostgreSQL installer.

Having created your PostgreSQL database, use the SQL script provided by Sparx Systems to create the required table definitions for Enterprise Architect. You can obtain the scripts from the Sparx Systems website, on the:

- Registered Corporate edition 'Resources' page (Registered users)
- Corporate edition 'Resources' page (Trial users)

Third Party Tools

If you are unfamiliar with PostgreSQL and DBMS systems in general, you might want to consider a suitable front end tool. One such tool is pgAdminIII. It provides a convenient graphical user interface to enable creation of databases, execution of scripts and restores.

After creating a PostgreSQL data repository in Enterprise Architect, you must set up the PostgreSQL ODBC driver.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- Ensure that the collation is set to the alphabet you use, such as Latin or Cyrillic

Set up a PostgreSQL ODBC Driver

After you have created a PostgreSQL database, you will need to setup an ODBC DSN to the new database in order for Enterprise Architect to connect to it.

Prerequisites

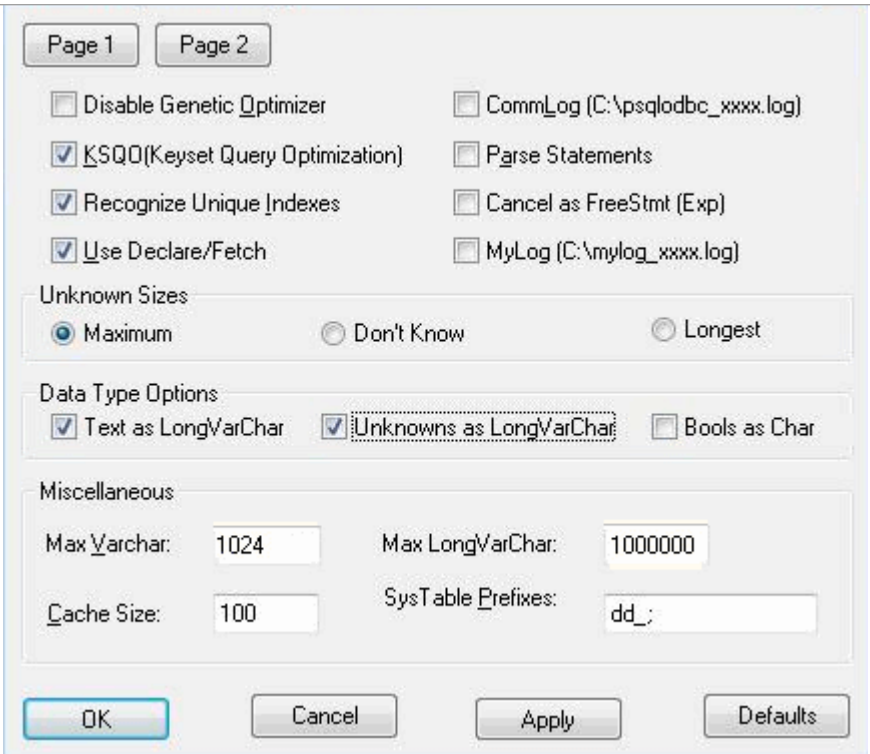
Install:

- PostgreSQL DBMS and repository
- PostgreSQL ODBC driver software version 7.03.01.00 or above (note that versions 8.3.4, 8.4.1 and 9.03 of the PostgreSQL ODBC Driver are not supported)

Set up the ODBC driver

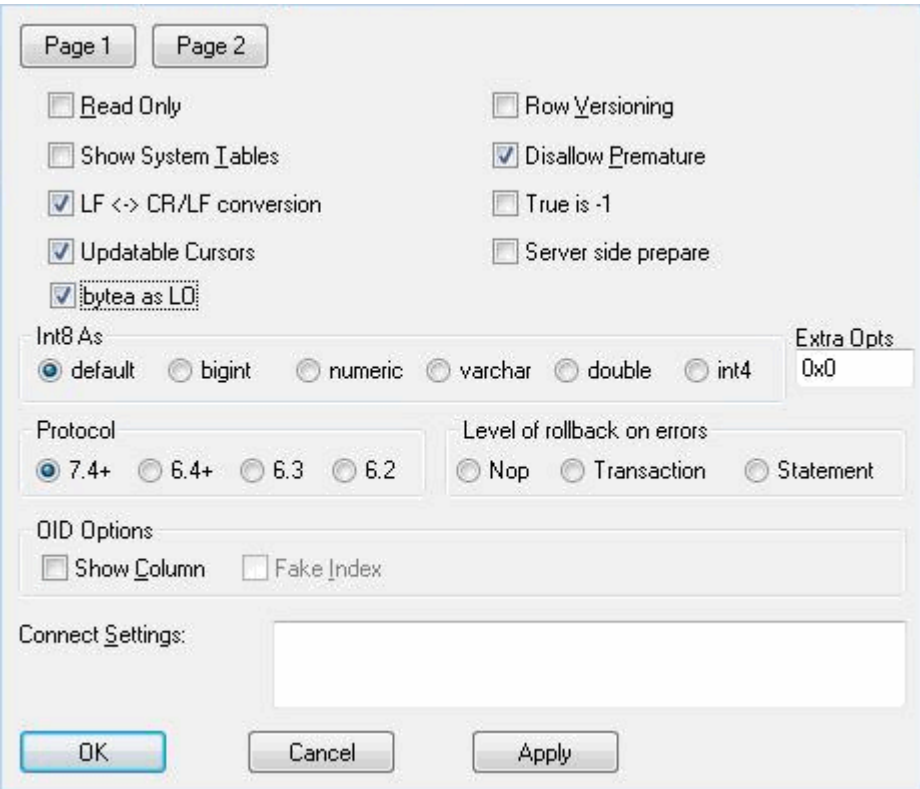
Your PostgreSQL driver is now available to connect to the repository from Enterprise Architect.

Step	Action
1	Under both 32-bit and 64-bit operating systems, Enterprise Architect requires 32-bit ODBC drivers to connect to a repository through ODBC. You can quickly load the correct 32-bit ODBC Data Source Administrator by selecting the 'Configure > User Tools > ODBC Data Sources' ribbon option. The ODBC Data Source Administrator window displays.
2	Click on the Add button. The 'Create New Data Source' dialog displays, enabling you to add a new DSN.
3	Select 'PostgreSQL UNICODE' from the list.
4	Click on the Finish button. The 'Postgre SQL Connector/ODBC' dialog displays.
5	Enter these configuration details: • A data source name for the connection • The actual name of the database • The host address of the DBMS server • User name • A description (optional) • The password
6	To set the advanced options, click on the Datasource button and set the options on 'Page 1' as shown:



Note: from v9.5.4 onwards some options shown in the above image are no longer available and can be ignored.

7 If you are using PostgreSQL version 8 to 9.5.4, set the options on Page 2 as shown:



- The 'Disallow Premature' checkbox should be checked

	• In the 'Protocol' panel, the '7.4+' radio button should be selected Note: from v9.5.4 onwards the two options listed above are no longer available and can be ignored.
8	Click on the OK button to complete the configuration.

Connect to a PostgreSQL Data Repository

To access a project in your MySQL data repository, you must connect to the data repository from Enterprise Architect.

Prerequisites

- The PostgreSQL repository and the project already exist
- You have SELECT, UPDATE, INSERT and DELETE access permissions
- The PostgreSQL ODBC driver has been set up

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to the repository

Step	Action
1	In the 'Open Project' dialog, select the 'Connect to Server' checkbox.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list.
4	Click on the Next>> button. The 'Connection' tab displays.
5	Click on the 'Use data source name' radio button and on the drop-down arrow in its field. From the list, select the ODBC driver you have set up to connect to your PostgreSQL repository.
6	Click on the Test Connection button to confirm that the details are correct.
7	If the test does not succeed, revise your settings. If the test succeeds, click on the OK button; the 'Connection Name & Type' dialog displays.
8	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.
9	If required, select the 'Encrypt Connection String' checkbox.

	This encrypts and hides the connection details of the database from the users that the connection string is given to.
10	If required, select the 'Lazy Load' checkbox to not load the full project view when the model is loaded; instead, only the parts that are necessary to display the visible portion of the tree are loaded. With this setting, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model.
11	If required, select the 'Use WAN Optimization' checkbox. To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you select this checkbox, complete the next three fields (see your administrator for the correct values); otherwise go to step 15.
12	In the 'Server' field, type the network name or address of the optimizer server.
13	In the 'Port' field, type the port on which the server is running on the remote machine.
14	In the 'DSN' field, type the data source name of the database as it appears on the remote machine.
15	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the Start Page; from now on, you can open the project again just by clicking on this name.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions

Create a Project in an Access 2007 Database

In setting up a project in an Access 2007 repository, you could be working in one of two situations:

- You are able to work in Access 2007 itself, in which case you can convert your .eap project directly to an Access 2007 .accdb database file, which you can connect to and open in Enterprise Architect
- You have access to an empty Access 2007 .accdb file, and need to transfer a .eap project into that .accdb file

In either case, before you convert or transfer the project data, you could perform a project integrity check on the .eap file you are using as a base (optional, but recommended).

Prerequisites

- The 'Microsoft Office 12.0 Access Database Engine OLE DB Provider' ODBC driver installed

Perform a Project Integrity Check

Step	Action
1	Open the base project or template .eap file.
2	Select and run 'Configure > Model > Integrity Check > Project Integrity'. This ensures your project data is 'clean' before uploading.

Convert a .eap file in Access 2007

Step	Action
1	Open MS Access 2007 and open the source .eap file within this product. Allow Access to convert the .eap file to a .accdb file. This forms the Access 2007 repository.

Transfer the project data into an empty .accdb file

Step	Action
1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select 'File to DBMS'.

4	In the 'Source Project' field, type the name of the .EAP file to copy to the repository. If the .EAP file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the ... button. The 'Datalink Properties' dialog displays.
6	Select 'Microsoft Office 12.0 Access Database Engine OLE DB Provider' from the list. Click on the Next button.
7	On the 'Data Source Details' page of the 'Datalink Properties' dialog, type in the full path to the Access 2007 .accdb file. Click on the OK button to return to the 'Project Transfer' dialog.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process. When the process is complete, you have created your project in an Access 2007 database and can now open it directly from Enterprise Architect, browsing for the .accdb file location in the 'Open Project' dialog.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- If you do not have Access 2007, you can download the Access Database Engine from the Microsoft downloads site
- Ensure that the collation is set to the alphabet you use, such as Latin or Cyrillic

Create a Project in a SQL Server Database

To create a project on a repository in SQL Server 2005 and above, or SQL Server Express 2005 and above, work through these stages:

- Stage 1: Create an empty database repository and set up the data tables
- Stage 2: Perform a project integrity check on the project file you are using as a base (optional, but recommended)
- Stage 3: Transfer the data
- Stage 4: Connect to the repository to open the project

Prerequisites

- A machine with SQL Server installed and running
- MDAC 2.6 or higher on the client machine
- Permissions to create databases on SQL Server (see the *SQL Server Security Permissions* Help topic)
- ALTER permission on the t_image table in Enterprise Architect, to be able to import model images

Create a SQL Server Repository

Step	Action
1	Create a new empty database.
2	Load the EASchema_1220_SQLServer.sql file from the Sparx Systems website into your SQL management console of choice (such as Microsoft SQL Server Management Studio).
3	Run the script to create the required database schema.

Perform a Project Integrity Check

Step	Action
1	In Enterprise Architect, open the file-based project or template from which you are creating the project on the repository.
2	Select the 'Configure > Model > Integrity Check > Project Integrity' ribbon option, and execute the check. This ensures your project data is 'clean' before being copied to the repository.

Transfer the project data to the repository

Step	Action

1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select '.EAP to DBMS'.
4	In the 'Source Project' field, type the name of the project file to copy to the repository. If the .EAP file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the ... button. The 'Datalink Properties' dialog displays.
6	Select 'Microsoft OLE DB Provider for SQL Server' or 'Microsoft OLE DB Driver for SQL Server' from the list. Click on the Next button.
7	On the 'Data Source Details' page of the 'Datalink Properties' dialog, type in the server name, database name and any security details required. Click on the OK button. The 'Project Transfer' dialog redisplays.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process.
10	When the process is complete, you have created a project on a SQL Server database and can now connect to it and open it from Enterprise Architect.

Create a SQL Server Repository

Creating a SQL Server database is fully documented in the product information provided with your SQL Server installer.

Having created your SQL Server database, use the SQL script provided by Sparx Systems to create the required table definitions for Enterprise Architect. You can obtain the script from the Sparx Systems website, on the Corporate edition 'Resources' page.

If you are unfamiliar with SQL Server and DBMS systems in general, you might want to consider a suitable front end tool, such as SQL Server Management Studio.

SQL Enterprise Manager example

Step	Action
1	In SQL Server Management Studio, locate the server on which to create your new project; for example: DBSERVER02\SQLEXPRESS.
2	Right-click and choose the 'New Database' option.
3	Enter a suitable name for the database. Set any file options as required. Ensure that the database collation is set to the alphabet you use, such as Latin or Cyrillic, and case-insensitive.
4	Click on the database to select it, then select the 'New Query' menu option.
5	In the Query window, use the 'Open File' dialog to locate the EASchema_1220_SQLServer.sql script file.
6	Click on the Open button. In the drop-down menu, check that you have selected the correct database to run the script in.
7	Click on the Execute button; SQL Server executes the script, which creates the base tables for an Enterprise Architect project.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- You should have ALTER permission on the t_image table in Enterprise Architect, to be able to import model images
- When creating a project in a SQL Server database you must have 'db_ddladmin' permission in order to execute the SET IDENTITY_INSERT (table) {ON | OFF} command

SQL Server Security Permissions

The security model implemented by Microsoft's SQL Server is quite powerful and highly configurable, supporting many different possible solutions for securing the data contained in SQL Server databases and ensuring it is only accessible to users with the required permissions. For a more detailed description and explanation of SQL Server permissions, see the SQL Server documentation.

Enterprise Architect users who plan to add, edit and delete contents in a SQL Server repository must have permissions to execute SELECT, UPDATE, INSERT and DELETE statements on all Tables in the Enterprise Architect database. The easiest way to achieve this is to grant the database roles of 'db_datareader' and 'db_datawriter' to each user.

Additional Permissions for Project Transfers

When an Enterprise Architect repository is transferred into a SQL Server based repository, it is necessary for Enterprise Architect to execute a number of SET IDENTITY_INSERT (table) {ON | OFF} commands during the process. This means the user performing the transfer must have a high level of security, in the role of 'db_ddladmin'.

Does Enterprise Architect support Windows Authentication?

Enterprise Architect does support Windows Authentication. However, the type of authentication is determined by the configuration of the connection used, and not by Enterprise Architect.

Windows Authentication to SQL Server is commonly used by Enterprise Architect users, but this requires that all Windows users in Enterprise Architect be defined on the SQL Server server and be granted the security roles 'db_datareader' and 'db_datawriter' for the repository.

Connect to a SQL Server Data Repository

After you have created a Microsoft SQL Server database, you can connect to it immediately without any further configuration directly from Enterprise Architect.

Prerequisites

- The SQL Server repository and the project already exist
- You have SELECT, UPDATE, INSERT and DELETE access permissions
- You have ALTER permission on the t_image table in Enterprise Architect, to be able to import model images
- Microsoft OLE DB Provider for SQL (this is usually part of the Windows Operating System, otherwise install MDAC 2.8)

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to the repository

Step	Action
1	In the 'Open Project' dialog, select the 'Connect to Server' checkbox.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Microsoft OLE DB Provider for SQL Server' or 'Microsoft OLE DB Driver for SQL Server' from the list.
4	Click on the Next>> button. The 'Connection' tab displays.
5	Type in the server details, including Server Name, User Name and Password.
6	Click on the 'Select the database on the server' option and on the drop-down arrow. From the list, select the project to connect to.
7	Click on the Test Connection button to confirm that the details are correct.
8	If the test does not succeed, revise your settings.

	If the test succeeds, click on the OK button; the 'Connection Name & Type' dialog displays.
9	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.
10	If required, select the 'Encrypt Connection String' checkbox. This encrypts and hides the connection details of the database from the users that the connection string is given to.
11	If required, select the 'Lazy Load' checkbox to not load the full project view when the model is loaded; instead, only the parts that are necessary to display the visible portion of the tree are loaded. With this setting, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model.
12	If required, select the 'Use WAN Optimization' checkbox. To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you select this checkbox, complete the next two fields (see your administrator for the correct values); otherwise go to step 15.
13	In the 'Server' field, type the network name or address of the optimizer server.
14	In the 'Port' field, type the port on which the server is running on the remote machine.
15	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the Start Page; from now on, you can open the project again just by clicking on this name.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions

Create a Project in a Sybase ASA/SQL Anywhere Database

To create a project in a repository on Sybase Adaptive Server Anywhere 8 or 9, or SQL Anywhere 10, 11 or 12, you work through these stages:

- Stage 1: Create an empty database repository
- Stage 2: Set up the ASA ODBC Driver
- Stage 3: Perform a project integrity check on the project file you are using as a base (optional, but recommended)
- Stage 4: Transfer the data
- Stage 5: Connect to the repository and open the project

Prerequisites

- A machine with Adaptive Server Anywhere installed and running
- Install SQL Anywhere Studio, this also installs the ASA ODBC driver

Create Database Repository

Step	Action
1	Create a new empty database.
2	Load the EASchema_1220_ SybaseASA.sql file from the Sparx Systems website into your SQL management console of choice (such as Sybase Central).
3	Run the script to create the required database schema.

Set up the ODBC DSN

Step	Action
1	Create a suitable ODBC Data Source to point to your new database.

Perform Project Integrity Check

Step	Action
1	In Enterprise Architect, open the file-based project or template from which you are creating the project on the repository.
2	Select and run 'Configure > Model > Integrity Check > Project Integrity'.

	This ensures your project data is 'clean' before being copied to the repository.

Transfer the Project Data

Step	Action
1	Open Enterprise Architect. (If the 'Open Project' dialog displays, click on the Cancel button to open with no project loaded.)
2	Select the 'Configure > Model > Transfer > Project Transfer' ribbon option. The 'Project Transfer' dialog displays.
3	In the 'Transfer Type' panel, select '.EAP to DBMS'.
4	In the 'Source Project' field, type the name of the project file to copy to the repository. If the .EAP file has Replication enabled, this must be removed before performing the transfer.
5	At the right of the 'Target Project' field, click on the ... button. The 'Datalink Properties' dialog displays.
6	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list. Click on the Next button.
7	In the 'Use Data source name' field, click on the drop-down arrow and select the ODBC Data Source you configured to point to your new database. Click on the OK button. The 'Project Transfer' dialog redisplays.
8	If required, select the 'Logfile' checkbox and type a path and filename for the data transfer log file.
9	Click on the Transfer button to begin the data transfer process.
10	When the process is complete, you have created a project on an ASA database and can now connect to it and open it from Enterprise Architect.

Create an Adaptive Server Anywhere Repository

Creating an ASA database is fully documented in the product information provided with your ASA installer.

Having created your ASA database, use the SQL script (ASA_EASchema.sql) provided by Sparx Systems to create the required table definitions for Enterprise Architect. You can obtain the scripts from the Sparx Systems website, on the:

- Registered Corporate edition 'Resources' page (Registered users)
- Corporate edition 'Resources' page (Trial users)

Third Party Tools

If you are unfamiliar with ASA and DBMS systems in general, you might want to consider a suitable front end tool. Sybase Central is one such tool, that can be installed along with the DBMS. It provides a convenient graphical user interface to enable creation of databases, execution of scripts and restores.

After creating an ASA data repository in Enterprise Architect, you must set up the ASA ODBC driver.

Notes

- This feature is available in the Corporate, Unified and Ultimate editions
- Ensure that the collation is set to the alphabet you use, such as Latin or Cyrillic

Set up an ASA ODBC Driver

After you have created a Sybase ASA database, you will need to setup an ODBC DSN to the new database in order for Enterprise Architect to connect to it.

Prerequisites

Install:

- Adaptive Server Anywhere - SQL Anywhere Studio 8 or higher, and create a repository
- ASA ODBC driver software (installed with the ASA DBMS)

Set up the ODBC Driver

Your ASA driver is now available to connect to the repository from Enterprise Architect.

Step	Action
1	Under both 32-bit and 64-bit operating systems, Enterprise Architect requires 32-bit ODBC drivers to connect to a repository through ODBC. You can quickly load the correct 32-bit ODBC Data Source Administrator by selecting the 'Configure > User Tools > ODBC Data Sources' ribbon option. The ODBC Data Source Administrator window displays.
2	Click on the Add button. The 'Create New Data Source' dialog displays, enabling you to add a new DSN.
3	Select 'Adaptive Server Anywhere' or 'SQL Anywhere' from the list.
4	Click on the Finish button. The 'ASA Connector/ODBC' dialog displays.
5	Enter these configuration details: • A data source name for the connection, on the 'ODBC' tab • User name and password on the 'Login' tab (dba, sql are the defaults when ASA is installed) • The server name and the path to the database, on the 'Database' tab • The network protocol on the 'Network' tab (if the database is on a network location)
6	Return to the 'ODBC' tab and click on the Test Connection button to confirm that the details are correct.
7	If the test succeeds, click on the OK button to complete the configuration. If the test does not succeed, review your settings.

Connect to an ASA Data Repository

To access a project in your Adaptive Server Anywhere (ASA) data repository, you must connect to the data repository from Enterprise Architect.

Prerequisites

- The ASA repository and the project already exist
- You have SELECT, UPDATE, INSERT and DELETE access permissions
- The ASA ODBC driver has been set up

Access

Ribbon	: Open Project
Keyboard Shortcuts	Ctrl+O

Connect to the repository

Step	Action
1	In the 'Open Project' dialog, select the Connect to Server button.
2	Click on the button. The 'Data Link Properties' dialog displays.
3	Select 'Microsoft OLE DB Provider for ODBC Drivers' from the list.
4	Click on the Next>> button. The 'Connection' tab displays.
5	Click on the 'Use data source name' radio button and on the drop-down arrow in its field. From the list, select the ODBC driver you have set up to connect to your ASA repository.
6	Click on the Test Connection button to confirm that the details are correct.
7	If the test does not succeed, revise your settings. If the test succeeds, click on the OK button; the 'Connection Name & Type' dialog displays.
8	Give the connection a suitable name so that you can recognize it in the 'Recent Projects' panel on the 'Open Project' dialog.

9	If required, select the 'Encrypt Connection String' checkbox. This encrypts and hides the connection details of the database from the users that the connection string is given to.
10	If required, select the 'Lazy Load' checkbox to not load the full project view when the model is loaded; instead, only the parts that are necessary to display the visible portion of the tree are loaded. With this setting, the model loads faster and users can begin work sooner, but at the expense of later small delays as Enterprise Architect loads specific portions of the model.
11	If required, select the 'Use WAN Optimization' checkbox. To improve performance over a Wide Area Network, remote database calls can be routed through a WAN Optimizer that compresses the data returned from the repository, reducing transfer time. If you select this checkbox, complete the next three fields (see your administrator for the correct values); otherwise go to step 15.
12	In the 'Server' field, type the network name or address of the optimizer server.
13	In the 'Port' field, type the port on which the server is running on the remote machine.
14	In the 'DSN' field, type the data source name of the database as it appears on the remote machine.
15	Click on the OK button to complete the configuration and open the project. This also adds the project name to the 'Recent' list on the Start Page; from now on, you can open the project again just by clicking on this name.

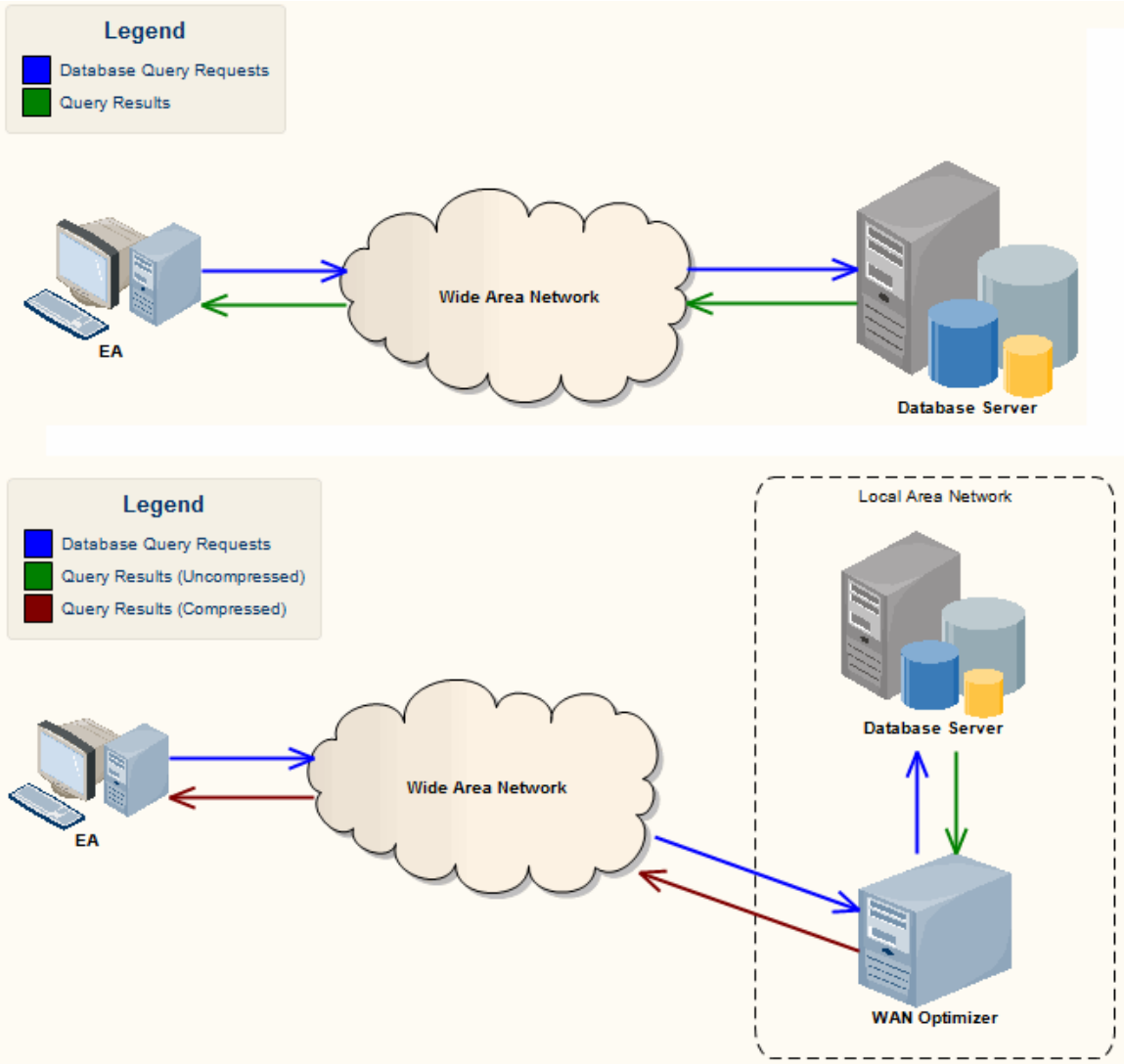
Notes

- This feature is available in the Corporate, Unified and Ultimate editions

The WAN Optimizer

You can significantly improve Enterprise Architect's performance in a Wide Area Network (WAN) by reducing the amount of data transmitted and, in turn, the number of network calls made. To achieve this, you can use the Sparx Systems Wide Area Network (WAN) Optimizer, a lightweight server installed on a Local Area Network (LAN) connection to a Database Management System (DBMS) that hosts an Enterprise Architect repository. You can configure the server to listen for client connections on a particular port; it acts as a local proxy to execute queries and return the results in a compressed format to the client.

In this diagram, transmission between Enterprise Architect and a DBMS is depicted first without and then with the WAN Optimizer.



You can download the WAN Optimizer installer from the 'Downloads' page of the Registered Users section of the Sparx Systems website. The Wan Optimizer Service installer package provides two installable features for the target machine:

- WAN Optimizer Service - the installer also helps register and start the service on the target machine, and add it to the Windows Startup folder
- WAN Optimizer Admin Client - to enable an administrator to administer and configure the service from a remote client

The Optimizer has its own *Sparx Systems WAN Optimizer User Guide*. See that Guide for more information on:

- WAN Optimizer Components

- Installing and Starting the WAN Optimizer Service
- Configuring the Service
- Troubleshooting

Notes

- The WAN optimizer forms the basis for the Sparx Systems Cloud Services, which in turn is the core of the Sparx Systems Pro Cloud Server

  Both of these facilities provide the basic function of the WAN Optimizer, but do so faster and more securely; they also have many more additional features

  Whilst you can still use the WAN Optimizer as described here, we recommend that you review the Cloud Services products and use one of them instead