

## LYNX Database Integration – Universal (Oracle or MSS)

The Series25 LYNX Interface uses a database integration to connect to any student information system which is hosted locally on an institution's servers.

The integration has two parts:

- A series of custom tables that track historical changes to SIS data
- The LYNX-APP, a lightweight Java application that exchanges data between those tables and the hosted Series25 database

This article explains how to deploy the LYNX Interface scripts necessary for database integration with your locally installed SIS. After the scripts are in place, you will be ready to [install the LYNX-APP](#).

You will be responsible for creating the process by which your SIS reads and writes from these tables. CollegeNET cannot design or troubleshoot this portion of the integration, but we provide a set of instructions and recommendations on the following page: [Connecting LYNX Universal to Your SIS](#).



Developing the integration with your SIS is a time-consuming process. Budget your project timeline accordingly.

### System Requirements

Your SIS environment must meet one of the following requirements:

- MS SQL Server 2012 or later
- Oracle Database 11g r2, 12c, 18c, or 19c

### Download LYNX Universal Scripts Package

Download the package of scripts here:

URL: <https://collegenet.files.com/f/e2802722d3c860d3/LYNX%20Customer%20Resources>

(Contact Series25 Support at [support@collegenet.com](mailto:support@collegenet.com) for credentials.)

- Oracle: LYNX-Universal-ORA.zip
- Microsoft SQL Server: LYNX-Universal-MSS.zip

The zip file contains the following scripts (with .sql extension). The first three (A, B, C) are "creation" scripts while the remaining two (D, E) are "quality control" scripts.

Script	Name	Purpose
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Script	Name	Purpose
A	a_uni_sis_mssql_security a_uni_sis_oracle_security	Creates a database user (MSS) or schema (ORA) to provide access to LYNX database tables for the LYNX application
B	b_uni_sis_mssql_schema b_uni_sis_oracle_schema	Creates database tables, sequences, and triggers under the LYNX schema
C	c_uni_sis_mssql_routines c_uni_sis_oracle_routines	Creates database functions and procedures under the LYNX schema
D	d_uni_sis_mssql_schema_qc	Checks that the LYNX database is deployed properly (currently only available for MSS)
E	e_uni_sis_mssql_data_qc	Checks that LYNX data tables are populated (currently only available for MSS)

## Deploy the SQL Scripts

Follow this procedure to properly deploy the scripts in your MSS or ORA database.

### Prepare the LYNX Username and Password

These scripts create and reference a user which provides access for the LYNX application. This is a new user. (Do not re-use credentials for an existing user.)

Before running any scripts, choose a username and password for this new user. Then open the creation scripts (A, B, and C) and edit them to include these credentials. Find and replace all references to LYNX\_USER and LYNX\_USER\_PASS.

### Run the Creation Scripts

Use the modified scripts (including the LYNX username and password chosen above) to create the LYNX integration.

For MSS installations, ensure that you are running the scripts against the SIS database itself. (You may choose to create the LYNX objects in a separate database rather than putting them directly into your SIS database. If you do this, run the scripts against this database instead of the SIS database when instructed below.)

1. Log in as an administrator to begin the process.
  - MSS: Log in to the database server for your SIS database.
  - ORA: Log in to the database server for your SIS schema.
2. Run the A script to create the LYNX schema/user and assign it the appropriate permissions.
3. Log in as the newly created LYNX user.
4. Run the B script to create tables and triggers.

5. Run the C script to create functions and procedures.

### Run the Quality Control Scripts

CollegeNET provides two scripts that perform a quick check to see if the LYNX database is deployed properly. These are included in the scripts package as D and E. Currently, they are only available for MSS databases.

After running the creation scripts, run the D and E scripts and resolve any reported errors. If you encounter anything you're not sure how to fix, email your assigned CollegeNET Technical Analyst for assistance.

### Connect Your SIS

The LYNX-APP created in the following step will sync course data between these new LYNX tables and your hosted Series25 environment.

Your institution is responsible for creating the process by which your SIS reads and writes from these tables. See [Connecting LYNX Universal to Your SIS](#) for more information.

### Install the LYNX-APP

Once you have completed the steps to deploy the LYNX database objects and populate them with data from your SIS, you are ready to [install the LYNX-APP](#).