EMSE TOOL

Topics

About the EMSE Tool

The EMSE Tool leverages third-party Source Code Control Systems (SCCS) such as Subversion and Github to facilitate easier storage, management, and deployment of EMSE scripts. Script developers can use their choice of script editor and SCCS to edit and manage their scripts, and use the EMSE Tool to deploy them into Automation.

The EMSE Tool provides the following capabilities:

- Connects to the SCCS via the Accela Gateway
- Supports two popular SCCS: Github and Subversion (SVN)
- Compares scripts between the SCCS and Automation
- Pulls scripts from the SCCS, builds, and deploys them into Automation. Building a script consolidates multiple custom scripts within the `INCLUDES_CUSTOM` directory into a single script file in Automation. Deploying a script replaces the current script entry in the Automation database with the new script from the SCCS.
- Pushes scripts from Automation into the SCCS. This capability can be used to begin a new repository or refresh scripts that may have been corrupted in the SCCS.
- Validates script syntax before building or deploying a script
- Integrates with EMSE scripts and Expression Builder scripts
- Applies Accela's standard naming and file structure conventions when deploying scripts to Automation

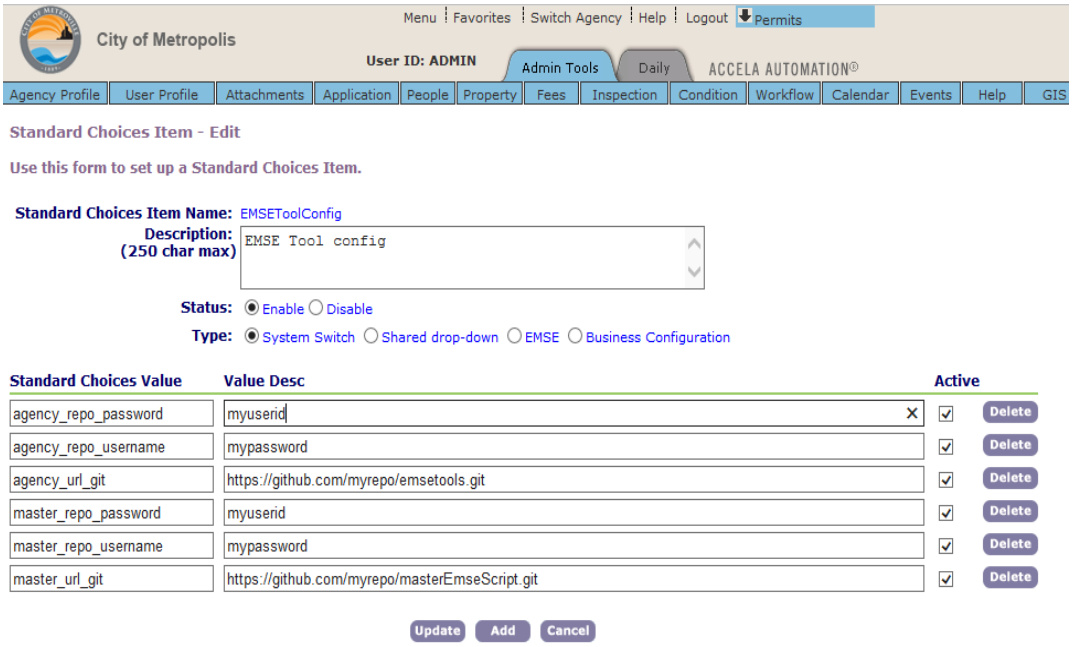
Configuring the EMSE Tool

SCCS Settings

An agency user must configure the EMSE Tool to connect to the appropriate SCCS repository. To configure the SCCS repository and connection settings:

1. Go to **Accela Automation Classic > Administration Tools > Standard Choices**.
2. On the **Standard Choices Search** page, enter *`EMSEToolConfig`*.
3. On the **Standard Choices Browse** page, edit **EMSEToolConfig**.

   *The **Standard Choice Item - Edit** page displays the EMSE Tool configuration settings. The **Standard Choice Value** column contains the EMSE Tool configuration parameter names, and the **Value Desc** column contains the parameter values. For example:*



4. On the **EMSEToolConfig Standard Choice Item - Edit** page, enter the SCCS settings for the Standard Choice values, as described in the following table. Note that an SCCS repository is either a Subversion or Github repository.

Standard Choice Value	Value Description
agency_repo_password	An agency user's password for the SCCS repository containing agency scripts. Automation connects to the SCCS repository using this password.
agency_repo_username	An agency user's username for the SCCS repository containing agency scripts. Automation connects to the SCCS repository using this username. **Note:** *The specified username must have permission to access the agency script SCCS repository.*
agency_url_svn	**For Subversion**: The Subversion URL for the agency script repository. You can get the Subversion URL from your repository's Subversion folder properties.
agency_url_git	**For Github**: The Github URL for the agency script repository. You can get the Github URL from the **HTTPS Clone URL** on your agency script repository's Github page.
master_repo_password	An agency user's password for the SCCS repository containing Automation master scripts. Automation connects to the SCCS repository using this password.
master_repo_username	An agency user's username for the SCCS repository containing Automation master scripts. Automation connects to the SCCS repository using this username. **Note:** *The specified username must have permission to access the master script SCCS repository.*
master_url_svn	**For Subversion**: The Subversion URL for the master script repository. You can get the Subversion URL from your repository's Subversion folder properties.
master_url_git	**For Github**: The Github URL for the master script repository. You can get the Github URL from the **HTTPS Clone URL** on your master script repository's Github page.

   Ensure that the **Active** checkbox is enabled for each of the Standard Choice values you entered.

5. Click **Update** to save your changes.

EMSE Tool Link from Automation

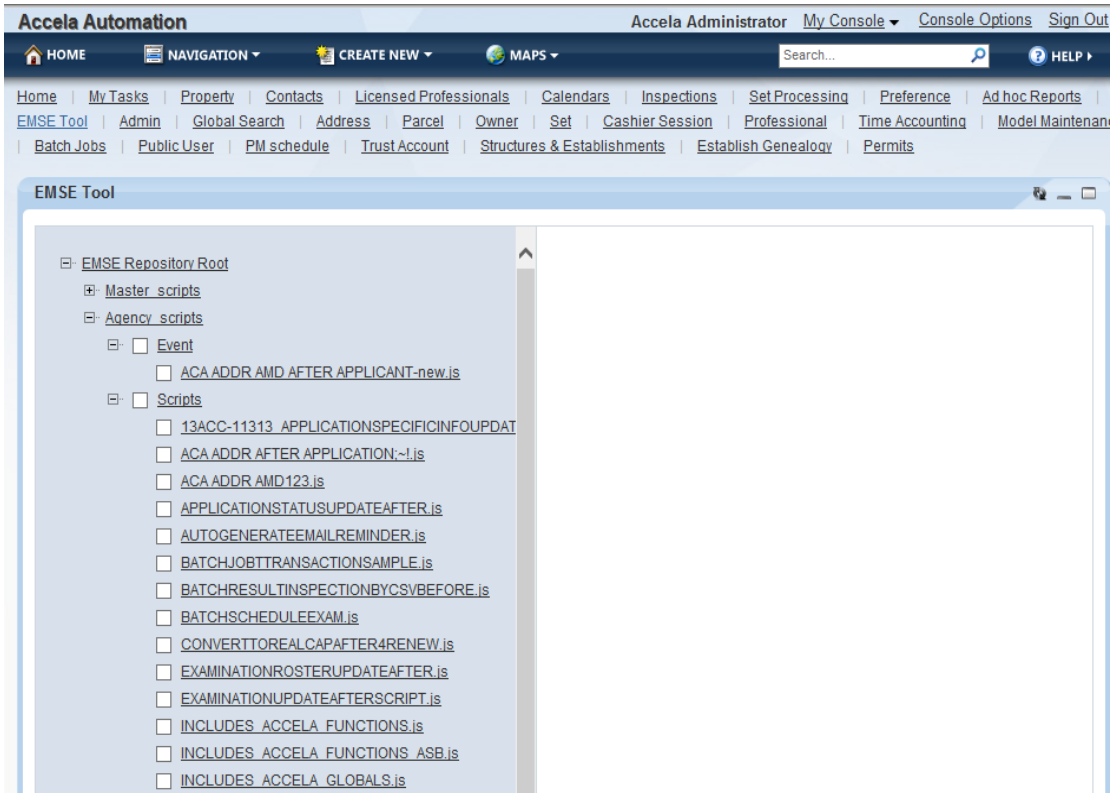
To provide agency users and EMSE script developers access to the EMSE Tool within Automation, an administrator must configure an Automation main link that opens the EMSE Tool portlet. For information about how to add a main link in Automation, see "Adding a Main Link" in *Accela Automation Administrator Guide*.

Using the EMSE Tool

Accessing the EMSE Tool Portlet

To access the EMSE Tool in Automation, click the **EMSE Tool** main link from the Automation home page. (This assumes that an administrator has created an EMSE Tool main link in Automation.) The EMSE Tool portlet shows a tree structure of the Master scripts and Agency scripts from the SCCS repository which have not been synchronized with the scripts in the Automation database.

The following example shows the Agency scripts in the SCCS repository that have not been deployed into or synchronized with Automation:



Pulling Scripts from Automation into SCCS

The EMSE Tool enables an agency user to initially populate or refresh an SCCS repository with the scripts stored in Automation.

Pulling a repository

The EMSE Tool automatically detects if a configured master or agency repository in the SCCS is empty. When you click the **EMSE Tool** link while the agency or master repository is empty,

the EMSE Tool manager prompts you to pull all the scripts. Click **OK** to confirm that you want to pull all the scripts from the Automation repository into your SCCS repository. After the EMSE Tool has pulled all scripts, both repositories are synchronized.

Pulling a script

If a script has been updated within Automation, you can select that script in the EMSE Tool to see the highlighted modifications on the AA script pane and pull the modified script into your SCCS repository.

To pull the script from Automation into your SCCS repository, click the **Pull** button under the AA script pane. After the EMSE Tool has pulled the script from Automation into the SCCS repository, both repositories are synchronized and the script is no longer displayed under the EMSE repository tree structure.

Deploying Scripts

When you deploy one or more scripts, the EMSE Tool validates each script and uploads the script(s) to the Automation database.

To deploy one or more scripts:

1. Select the script(s) from the EMSE Repository tree structure.
2. Right-click, and choose **Deploy**.

The EMSE Tool uses the JavaScript engine to validate script syntax such as missing keyword, incomplete loop or branch, undefined variable, unmatched symbol pairs, and others. For each script validation failure, the EMSE Tool displays the script line number where the syntax error occurred. Fix the error in your script editor, check-in your modifications in your SCCS repository, and deploy the script again in EMSE Tool.

After a script has been deployed, it is stored in the Automation database, and is no longer displayed in the EMSE Repository tree structure.

Building and Deploying Custom Scripts

Building a script applies to the custom scripts in the `Includes Custom` folder in the Agency repository. When you build a script, all the custom scripts in the `Includes Custom` folder will be concatenated into one script file. You can then deploy the built custom script file into Automation.

To build the `Includes Custom` script:

1. Select the `Includes Custom` folder from the EMSE Repository tree structure.

   The left script pane lists the custom scripts in the Includes Custom folder.

2. Click **Build**.

   The right script pane displays the Includes Custom script file containing all custom scripts.

To deploy the `Includes Custom` script:

1. Select the `Includes Custom` folder from the EMSE Repository tree structure.

   The left script pane lists the custom scripts in the Includes Custom folder.

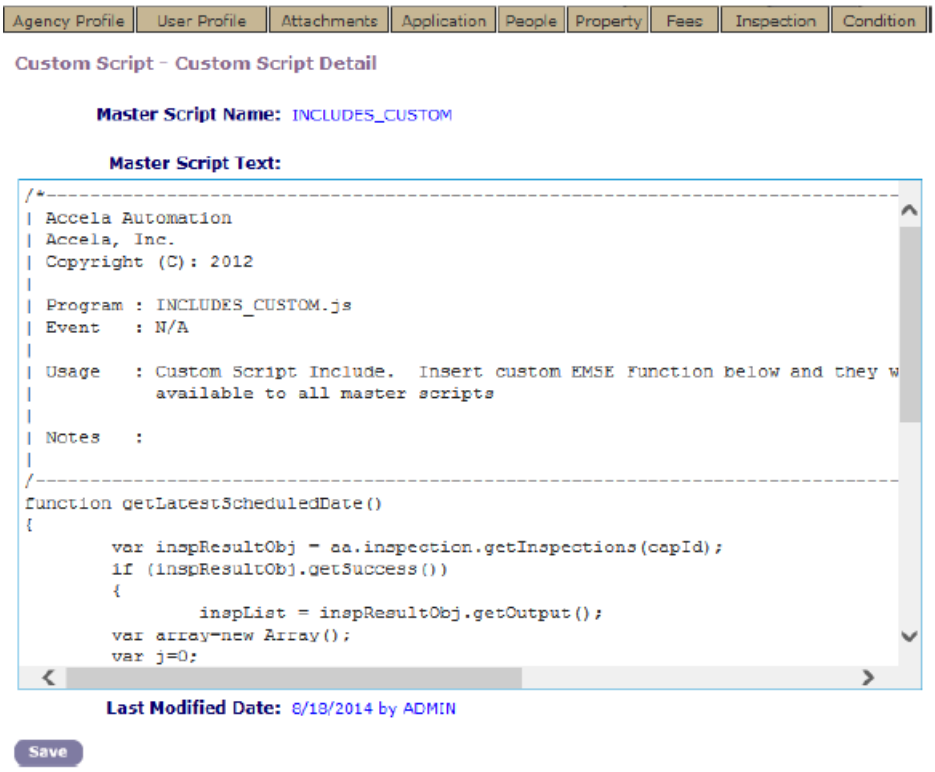
2. Click **Deploy**.

   The right script pane displays the Includes Custom script file containing all custom scripts.

To find the Includes Custom file in Automation:

1. Go to **Accela Automation Classic**.
2. Select **Events** > **Custom Scripts**.

   The Custom Script Detail page displays the built Includes Custom script file. For example:



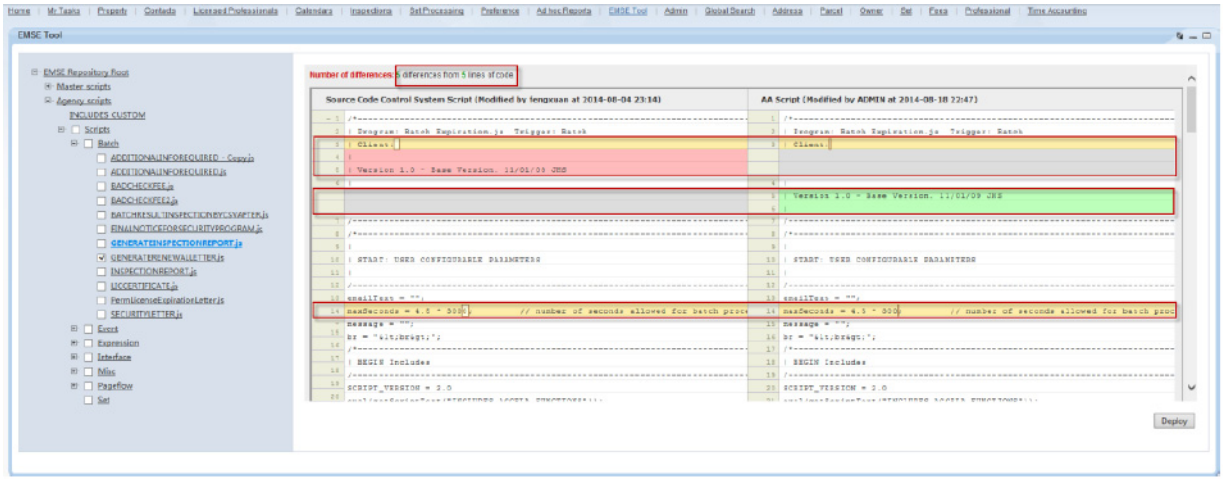
Comparing a Script between Automation and SCCS

You can compare scripts in your SCCS repository with the deployed scripts in Automation to determine what has been modified.

To compare a script between Automation and SCCS:

1. Select the script in the EMSE Repository tree structure.
2. Right-click, and choose **Diff**.

   The EMSE Tool displays the script from the SCCS repository on the left pane and the script from Automation on the right pane, counts the number of differences, and highlights the differences. For example:



Related Documentation

- *Accela Automation Scripting Guide*
- *Accela Automation Administrator Guide*