RES ONE®
Automation
AES-256 Conversion Tool

10.2.0.0
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Chapter 1: About the RES ONE Automation AES-256 Conversion Tool

1.1 Introduction

In RES ONE Automation version 10.1.0.0, AES-256 encryption was introduced for the Datastore. This type of encryption was applied automatically for new Datastores. To apply AES-256 encryption to existing environments, a new Datastore had to be created and filled using a Building Block from the legacy environment.

The RES ONE Automation AES-256 Conversion Tool simplifies this by performing an in-place conversion of fields and components that need to be secure, from the Proprietary Obfuscation that was used previously, to AES-256 encryption in the existing Datastore.

1.2 Version information

<table>
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<th>Remarks</th>
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<tr>
<td>10.2.0.0</td>
<td>The RES ONE Automation AES-256 Conversion Tool can be used to convert RES ONE Automation environments version 10.2 and higher. Please note, that all Consoles, Dispatchers and Agents must be upgraded to version 10.2 or higher, to be able to function properly after the conversion.</td>
</tr>
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The RES ONE Automation AES-256 Conversion Tool can be run from any machine running a Microsoft Windows version that is supported by RES ONE Automation, and that can connect to the Datastore. The Conversion Tool can be used in the following ways:

Converting the Datastore encryption using the Conversion Wizard (on page 3)

Unattended conversion using command-line parameters (on page 4)

Once the encryption has been converted, you cannot revert to the previous state.
2.1 Converting the Datastore encryption using the Conversion Wizard

Before using the Conversion Tool, it is important to make the following preparations:

1. Upgrade your RES ONE Automation environment to version 10.2 or higher.
2. Make a back-up of your Datastore before running the Conversion Tool.

After the preparations have been completed, start the Conversion Tool by double-clicking on it and follow the steps as prompted.

- In the step **Datastore configuration**, enter the connection settings for the Datastore.
  - If you run the Conversion Tool on a machine with RES ONE Automation installed, these settings will be pre-filled. Because of security reasons, the **Password** must be retyped manually for non-AES-256 encrypted Datastores.
  The wizard validates if the correct Datastore revision level is used.
- In the step **Convert or Verify**, you can choose to:
  - **Verify**: with this option, the encryption type (legacy (displayed as *Wisdom*) or AES-256) will be verified for the specified Datastore.
  - **Convert**: with this option, the legacy encrypted fields will be converted to AES-256 encryption.
  - Additionally, you can set the **scope**:
    - **Database Main Tables**: Objects like Run Books, Projects and Modules, scheduled and active Jobs, all components.
    - **Database History Tables**: Job history.
  - Optionally, an *estimation* of the duration can be given before the conversion or verification.
- Before the verification or conversion, you will get a summary of the selected operation and - if asked - the estimated time of the operation. Please note that:
  - When running the verification, your environment will be available for business operations.
  - When running the conversion:
    - the Datastore will be *locked* during conversion of the **Database Main Tables**. Dispatchers will be taken offline automatically.
    - No RES ONE Automation Consoles, including the Management Portal, must be open.
    - The Datastore cannot be accessed by other processes.
    - the Datastore will be *available* during conversion of the **Database History Tables**, with the exception of Job rescheduling.
  - After the verification or conversion, you will get an overview of the results. The detailed results of the operation can be viewed in the logfile that is stored in the same folder as the Conversion Tool.

Please note, that conversion of the **Database Main Tables** must not be interrupted.

**Database History Tables**

- During conversion of the **Database History Tables**, the RES ONE Automation Conversion Tool can be canceled. You can start the Conversion Tool again to resume conversion. This should not be done during conversion of the **Database Main Tables**. Please note, that Cancel-and-Resume is *not* supported when performing an unattended conversion of the Datastore, using command-line parameters.
- If **Database History Tables** is selected separately, this will only work after the **Database Main Tables** have been converted.
2.2 Unattended conversion using command-line parameters

Before using the Conversion Tool, it is important to make the following preparations:

1. Upgrade your RES ONE Automation environment to version 10.2 or higher.
2. Make a back-up of your Datastore before running the Conversion Tool.
3. Take all Dispatchers offline.

Please note, that once the conversion of either the Database Main Tables or the Database History Tables has started, the process must not be interrupted until it has completed.

After the preparations have been completed, you can start the Conversion Tool from the command line. The following command-line parameters are available:

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<th>Value</th>
<th>Comments</th>
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<td>DBSERVER</td>
<td>&lt;SERVERNAME&gt;</td>
<td>Specifies the database server the Conversion Tool should connect to.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example: DBSERVER=SQLServer01</td>
</tr>
<tr>
<td>DBNAME</td>
<td>&lt;DATABASENAME&gt;</td>
<td>Specifies the name of the database the Conversion Tool should connect to.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example: DBNAME=AutomationDB</td>
</tr>
<tr>
<td>DBTYPE</td>
<td>MSSQL, DB2, ORACLE, MYSQL,</td>
<td>Specifies the database type.</td>
</tr>
<tr>
<td></td>
<td>MSSQLAZURE</td>
<td>Example: DBTYPE=MSSQL</td>
</tr>
<tr>
<td>DBUSER</td>
<td>&lt;DBUSERNAME&gt;</td>
<td>Specifies the database user name the Conversion Tool should use to connect to the database.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example: DBUSER=AutomationDBUser</td>
</tr>
<tr>
<td>DBPASSWORD</td>
<td>&lt;DBPASSWORD&gt;</td>
<td>Specifies the plaintext password the Conversion Tool should use to connect to the database.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example: DBPASSWORD=AutomationDBUserPassword</td>
</tr>
<tr>
<td>VERIFYONLY</td>
<td></td>
<td>Specifies that the Conversion Tool should only verify the Datastore, and not convert it.</td>
</tr>
<tr>
<td>SCOPE</td>
<td>Active, History or Both</td>
<td>Specifies which tables the Conversion Tool should process. When specifying History, the Database Main Tables (indicated by Active) must already be converted.</td>
</tr>
<tr>
<td>SILENT</td>
<td></td>
<td>Suppresses all messages during execution.</td>
</tr>
</tbody>
</table>

Example:
"C:\ConversionTool\RES ONE Automation AES-256 Conversion Tool.exe"
/dbserver=srv-<SERVERNAME> /dbname=AutomationDB /dbtype=mssql
/dbuser=AutomationDBUser /dbpassword=AutomationDBUserPassword /scope=both /silent
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