Server-side Mapping Files

Server mapping enables the RPC server to correctly support special COBOL syntax such as `REDEFINE`s, `SIGN LEADING` and `OCCURS DEPENDING ON` clauses, `LEVEL-88` fields, etc. If one of these elements is used, the IDL Extractor for COBOL automatically extracts a server mapping file in addition to the IDL file (interface definition language). Also, the COBOL Wrapper may generate a server mapping file for RPC server generation. The server mapping is used at runtime to marshal and unmarshal the RPC data stream. There are client-side mapping files (EntireX Workbench files with extension .cvm) and server-side mapping files (Workbench files with extension .svm). If you have not used server-side mapping, we recommend you use client-side mapping. See *Server Mapping Files for COBOL* in the EntireX Workbench documentation.

This chapter covers the following topics:

- Server-side Mapping Files in the RPC Server
- Deploying Server-side Mapping Files to the RPC Server
- Undeploying Server-side Mapping Files to the RPC Server
- Change Management of Server-side Mapping Files
- List Deployed Server-side Mapping Files
- Check if a Server-side Mapping File Revision has been Deployed
- Is There a Way to Smoothly Introduce Server-side Mapping Files?

See also *Source Control of Server Mapping Files* | *Comparing Server Mapping Files* | *When is a Server Mapping File Required?* | *Migrating Server Mapping Files* in the EntireX Workbench documentation.

Server-side Mapping Files in the RPC Server

For an IMS Connect RPC Server, server mapping information is contained in a server-side mapping file (EntireX Workbench file with extension .svm) See *Server Mapping Files for COBOL*. Server mapping files are provided as operating system files in an RPC server related server-side mapping container (directory or folder). The files have the same format as in the Workbench. See *Configuring the IMS Connect Side*.

If *no* server requires a server mapping file, you can omit the property `ims.mapping.folder`.

If *one* server requires a server mapping file, provide the property `ims.mapping.folder`.

See also *Deploying Server-side Mapping Files to the RPC Server*.

Deploying Server-side Mapping Files to the RPC Server

Deploy a server-side mapping file (Workbench file with extension .svm) to the RPC server manually. See *Server Mapping Files for COBOL* in the EntireX Workbench documentation.

To deploy a server-side mapping file

1. Make sure the server-side mapping container (directory or folder) is configured. See *Server-side Mapping Files in the RPC Server*.
2. Copy the server-side mapping file to the server-side mapping container.

Undeploying Server-side Mapping Files to the RPC Server

Undeploy a server mapping file (Workbench file with extension .svm) from the RPC server manually. See *Server Mapping Files for COBOL*.

To undeploy a server-side mapping file manually

- Delete the server-side mapping file from the server-side mapping container (directory or folder). See *Server Mapping Files for COBOL*.

Change Management of Server-side Mapping Files

Under UNIX and Windows, change management for a directory or folder (server-side mapping container, see *Server-side Mapping Files in the RPC Server*) is similar to change management within ordinary operating system directories (folders). All updates to the directory or folder done after a backup must be kept.

All EntireX Workbench server-side mapping files (.svm) added since the last backup should be available. See *Server Mapping Files for COBOL* in the EntireX Workbench documentation.

List Deployed Server-side Mapping Files

Use the Windows Explorer (for Windows) or the `ls` command (for UNIX) to list the contents of the server-side mapping container (directory or folder). See *Server-side Mapping Files in the RPC Server*.

Check if a Server-side Mapping File Revision has been Deployed

Server-side mapping files in the server-side mapping container correspond to EntireX Workbench files with extension .svm (same format). See *Server Mapping Files for COBOL* in the EntireX Workbench documentation. Each line relates to an IDL program and contains a creation timestamp at offset 276 (decimal) in the format *YYYYMMDDHHIISST*. Precision is 1/10 of a second. The creation timestamp can be checked.

The timestamp can be found on the same offset in the server-side mapping files stored in the server-side mapping container (directory or folder). See *Server-side Mapping Files in the RPC Server*.

Is There a Way to Smoothly Introduce Server-side Mapping Files?

All EntireX RPC servers can be executed without server-side mapping files. See *Server-side Mapping Files in the RPC Server*. There is no need to install the server-side mapping container if the following conditions are met:

- You do not use features that require server mapping; see *When is a Server Mapping File Required?*
- Server-side type of COBOL mapping is switched on in the EntireX Workbench. If you have not used server-side mapping, we recommend you use client-side mapping. See *Server Mapping Files for COBOL*.

You can also call COBOL servers generated or extracted with previous versions of EntireX mixed with a COBOL server that requires server-side mapping. All EntireX RPC servers are backward compatible.