

OpenTwin – Local Directory Service Documentation

Version 1.0

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1 Introduction

This documentation describes the Local Directory Service.

2 Configuration

The Local Directory Service requires an environment variable containing the configuration set.

The environment variable name is: [OT_LOCALDIRECTORYSERVICE_CONFIGURATION](#).

The configuration is expected to be a JSON Object. If the JSON is broken (missing members, wrong data types, ...) the service startup will be cancelled. The exit code represents the occurred error (See: [Exit codes](#)).

2.1 Configuration JSON syntax

```
{
  "MaxServiceRestarts": 1,           // Global default
  "LauncherName": "<Executable name>", // Optional, default: open_twin.exe
  "ServicesLibraryPath": "<LibraryPath>", // Optional, default: LDS path
  "SupportedServices": [
    "Service name only",           // String only: Service name only
    {                               // Object instead: More options
      "Name": "<Service name>",
      "Type": "<Service type>",    // Optional, default: Type = Name
      "MaxRestarts": 1             // Optional, default: Global default
    },
    ...
  ]
}
```

2.1.1 General

Member	Type	Description
MaxServiceRestarts	Unsigned integer	The number describes the <u>default maximum number of restarts</u> for every service after a crash. The restart counter will count for every service in every session separately. The restart counter will not reset after a service has been successfully restarted, only after the service was shutdown regularly. If the value is 0 or the maximum service restart counter has been reached the affected session will be shut down in case of a service crash. The value can be overwritten for every service separately (See: Service provided as Object).
LauncherName	String	Optional: The name of the executable where the services will be attached to. Default: open_twin.exe (On windows)
ServicesLibraryPath	String	Optional: The path where the services are located. This path is used to launch a service (Path + Service name). Default: Will be set to the same path where the Local Directory Service is running at.

Member	Type	Description
SupportedServices	Array	The array contains all services that can be started by this Directory Service. If a service start will be requested for a service that is not contained in this list, an error message will be returned to the caller. (For more information see: Supported Services)

2.1.2 Supported Services

The supported services can be provided by a string or an object.

2.1.2.1 Service provided as String

If a string is provided, the service type and name will be set to the specified string. The other values will be set to their default value.

2.1.2.2 Service provided as Object

Member	Type	Description
Name	String	The name of the service (Must be unique). The name of the service must match the service file (e.g. Name = "MyService", dll file on windows = "MyService.dll")
Type	String	Optional: The type of the service Default: The name of the service will be set as the service type as well.
MaxRestarts	Unsigned integer	Optional: If provided the maximum restarts for the service will be set to the value. Default: The global value will be used (See: General)

3 Exit codes

Exit code	Description
-15	Configuration: JSON Entry: Services library path is not a string
-14	Configuration: JSON Entry: Launcher name is not a string
-13	Configuration: JSON Entry: Max Service restarts is not an unsigned integer
-12	Configuration: JSON Entry: Global max service restarts is missing
-11	Configuration: JSON Entry: Service type is not a string
-10	Configuration: JSON Entry: Service type is empty
-9	Configuration: JSON Entry: Service name is not a string
-8	Configuration: JSON Entry: Service name is empty
-7	Configuration: JSON Entry: Service name is missing
-6	Configuration: Supported service duplicate
-5	Configuration: JSON Entry: Supported service is not a string nor an object
-4	Configuration: JSON Entry: Supported services is not an array
-3	Configuration: JSON Entry: Supported services is missing
-2	Configuration: JSON: Is not an object
-1	Configuration: Configuration environment variable not set
0	No errors occurred
1	Initialization: Invalid service URL syntax

4 Document Version History

Version Nb.	Changes	Editor	Date
1.0	Creation of document	Alexander Küster	08.10.2022