

xuml-tool

Runtime 2020.7 xuml-tool 1.0.0 The xUML Runtime Tool **xuml-tool** is a tool that provides means to work with xUML repositories. You can

- [unpack a repository to a chosen directory](#)
- [deploy a repository](#)
- [run a repository](#)
- [dump some info on the repository](#)
- [specify dedicated xUML service settings for deployment](#)

System Requirements

This tool works on Linux and xuml-tool 1.4.0 Windows operating systems, though not all commands are available on Windows.

Command	Linux	Windows
unpack	✓	✓
deploy	✓	✓
run	✓	✗
dump-info (and all show commands)	✓	✓
validate	✓	✗

On Linux, you need at least

- Linux kernel 4.19
- GLibc 2.28

Common Options

All commands of the xuml-tool accept the following common options:

Option	Description	Allowed Values		Example
-h --help	Show either the help of the xuml-tool (including a list of all available commands), or the help of the selected command.			xuml-tool deploy --verbose . /hello_world.rep /opt /xuml_services
--help-all	Show the complete help of the xuml-tool: all options, all commands.			
-log --log-level	Set the log level for the used command. This option excludes the usage of --mute and --verbose.	off	No logging.	
		critical	Only log critical errors.	
		error	Log all errors.	
		warning	Log errors and warnings.	
		info	Log errors, warnings, and some general information (default).	
		debug	Log errors, warnings, general and debug information.	
		trace	Log a complete trace.	

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Related Pages:

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- [xUML Runtime Command Line Options](#)
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-m --mute	Disable all logging. This option excludes the usage of --log-level and --verbose.	
-v --verbose	Enable debug logging. This option excludes the usage of --log-level and --mute.	

Commands

unpack

xuml-tool 1.0.0 Unpack a given repository file to the destination directory.
The repository will be unpacked to a sub-directory in the destination directory. The name of the sub-directory is derived from the repository file name.

Parameters / Options	Mandatory	Description	Allowed Values		Example
Path to a repository file.	✓		a valid path		xuml-tool unpack . /hello_world.rep .
Path to a parent directory to extract the repository to.	✓				
--create-directories		xuml-tool 1.5.0 Create missing directories instead of aborting the command.	0	Do not create missing directories (default).	
			1	Create missing directories during the command.	
--tmp-files-policy		xuml-tool 1.5.0 Specify whether to keep or remove temporary files used during the execution of this command.	leave	Keep the temporary files.	
			remove	Remove the temporary files (default).	
--service-directory-name		xuml-tool 1.6.0 Specify the name of the deployment directory for the service. If not existent yet, the directory will be created automatically. If this option is not specified, the repository will be unpacked to the default directory bridge_<name of the service> .	a valid directory name		

deploy

xuml-tool 1.0.0 Deploy a given repository to a given destination.
The repository will be unpacked to a sub-directory in the destination directory. The name of the sub-directory is derived from the composite service name.


Repositories that have been deployed with this command satisfy xUML Runtime requirements and can be run by starting the xUML Runtime as described on [xUML Runtime Command Line Options](#).

They do not satisfy Bridge requirements, though, and cannot be managed with a Bridge. Do not use `deploy` to deploy a repository to a Bridge data directory.

Parameters / Options	Mandatory	Description	Allowed Values	Example
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Path to a repository file.			a valid path		xuml-tool deploy . /hello_world.rep /opt/xuml_services
Path to a parent directory to extract the repository to.					
--server-hostname		<div>Specify a value for setting <code>\${server_hostname}</code>. Upon deploying to a Bridge, this setting is replaced automatically by the configured external host name. When deploying with xuml-tool, it must be set explicitly.</div> <div><code>\${server_hostname}</code> can also be specified by environment variable <code>XUMLT_SERVER_HOSTNAME</code>. Refer to xUML Service Settings below for an explanation of how to provide setting variables for deployment.</div>	<div>local host</div> <div>Default value if not specified.</div>	a valid external host name	
--existing		Specify what to do if the repository being deployed is already existent in the target directory.	remove	Remove the repository from the target folder if already existent, and deploy the new repository. xuml-tool 2.0.1Does not delete the files specified with the --keep option.	
			deploy	xuml-tool 2.0.1Replace the complete repository, all files. Can only be used if the name of the service has not changed.	
			overwrite	Overwrite files of an already existing repository.	
			abort	Abort deployment if the repository is already existent (default).	

--forced-ps-owner-id		<p>xuml-tool 1.4.0Set this value as a fix persistent state owner ID for this service.</p> <div> <p>The owner ID can also be specified by environment variable <code>XUMLT_FORCED_PS_OWNER_ID</code> . Refer to xUML Service Settings below for an explanation of how to provide setting variables for deployment.</p> </div>	a positive integer	
--global-variables-file		<p>xuml-tool 1.5.0Replace global variables in setting values with the values specified in the given file. The file is a JSON file containing key /value pairs like</p> <div> <pre>{ "VAR_NAME": "variable value", ... }</pre> </div> <p>You need to manually create this file.</p>	a valid JSON file containing the variable names and values	
--create-directories		xuml-tool 1.5.0Create missing directories instead of aborting the command.	0	Do not create missing directories (default).
			1	Create missing directories during the command.
--tmp-files-policy		xuml-tool 1.5.0Specify whether to keep or remove temporary files used during the execution of this command.	leave	Keep the temporary files.
			remove	Remove the temporary files (default).
--service-directory-name		<p>xuml-tool 1.6.0Specify the name of the deployment directory for the service. If not existent yet, the directory will be created automatically. If this option is not specified, the repository will be deployed to the default directory bridge_<name of the service>.</p>	a valid directory name	

--keep		<p>xuml-tool 1.6.0 Prevent certain files from being overwritten by the deployment.</p> <p>xuml-tool 2.0.1 This option takes a file path relative to the instance home. It can be given multiple times, thus protecting multiple files.</p> <div>  This option cannot be used together with --existing abort. </div> <p>If the protected file path already exists, it will not be overwritten. If it does not exist, it will be copied from the source.</p>	a valid path	<pre>xuml-tool deploy . /hello_world.rep /opt /xuml_services -- existing overwrite --keep /opt /xuml_services /hello_world /repository /resource s/hello.db</pre>
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Refer to [xUML Service Settings](#) below for an explanation of how to provide setting variables for deployment.

run

xuml-tool 1.0.0 Deploy and run a given repository.

This command uses the [deploy command](#) described above in combination with Runtime command **bridgeserver** (see [xUML Runtime Command Line Options](#)).

Parameters / Options	Mandatory	Description	Allowed Values	Example
Path to a repository file or to a deployed repository.	✓	<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be deployed and started. The deploy target directory is derived from the configuration file specified with --server-config. For deployed repositories: Provide the path to the service directory of the service to be started. Usually this will be a directory name starting with bridge_.... 	a valid path	<pre>xuml-tool run ./hello_world.rep --server-config config.json --server-hostname scheer-acme.com</pre>
--server-config	✓	<p>Provide the path to an xUML Runtime configuration file containing Runtime command line options. The contents of such a file are described on xUML Runtime Command Line Options.</p> <p>This file must at least contain a minimal configuration consisting of</p> <ul style="list-style-type: none"> the path to a license file (license) the path to the bridgeserver binary directory (dirs.binary) the path to the data directory (equivalent of the Bridge data directory) (dirs.data) 	a valid path to a configuration file	
--server-hostname		Specify a value for setting <code>server_hostname</code> . Upon deploying to a Bridge, this setting is replaced automatically by the configured external host name. When deploying with	<div> <div>I</div> <div>o</div> <div>c</div> <div>a</div> <div>l</div> <div>h</div> <div>o</div> <div>s</div> </div>	Default value if not specified.

		<div>xuml-tool, it must be set explicitly.</div> <div><code>\${server_hostname}</code> can also be specified by environment variable <code>XUMLT_SERVER_HOSTNAME</code>. Refer to xUML Service Settings below for an explanation of how to provide setting variables for deployment.</div>	a valid external host name		
--existing		Specify what to do if the repository being deployed is already existent in the target directory.	remove	Remove the repository from the target folder if already existent, and deploy the new repository.	
			overwrite	Overwrite files of an already existing repository.	
			abort	Abort deployment if the repository is already existent (default).	
--keep		<div>xuml-tool 1.6.0Prevent certain files from being overwritten by the deployment.</div> <div>xuml-tool 2.0.1This option takes a file path relative to the instance home. It can be given multiple times, thus protecting multiple files.</div> <div><div> This option cannot be used together with --existing abort.</div><div>If the protected file path already exists, it will not be overwritten. If it does not exist, it will be copied from the source.</div></div>		<pre>xuml-tool run ./hello_world.rep /opt/xuml_services --existing overwrite --keep /opt/xuml_services /hello_world /repository /resources/hello.db</pre>	
--create-directories		xuml-tool 1.5.0Create missing directories instead of aborting the command.	0	Do not create missing directories (default).	<pre>xuml-tool run ./hello_world.rep --server-config config.json --server-hostname scheer-acme.com</pre>
			1	Create missing directories during the command.	
--controller-only		xuml-tool 2.0.1Start only the controler service of the specified service instance.			

--forced-ps-owner-id		<p>xuml-tool 1.4.0Set this value as a fix persistent state owner ID for this service.</p> <div><p>The owner ID can also be specified by environment variable <code>XUMLT_FORCED_PS_OWNER_ID</code> . Refer to xUML Service Settings below for an explanation of how to provide setting variables for deployment.</p></div>	a positive integer	
--global-variables-file		<p>xuml-tool 1.5.0Replace global variables in setting values with the values specified in the given file. The file is a JSON file containing key /value pairs like</p> <div><pre>{ "VAR_NAME": "variable value", }</pre></div> <p>You need to manually create this file.</p>	a valid JSON file containing the variable names and values	
--service-directory-name		<p>xuml-tool 1.6.0Specify the name of the directory the service has been deployed to. This option needs to be specified if the service has not been deployed to the default directory bridge_<name of the service> (see option <code>--service-directory-name</code> for deploy).</p>	a directory containing a deployed service	
--tmp-files-policy		<p>xuml-tool 1.5.0Specify whether to keep or remove temporary files used during the execution of this command.</p>	l e a v e	Keep the temporary files.
	r e m o v e		Remove the temporary files (default).	

dump-info

xuml-tool 1.3.0Display all information on a repository. This command prints the information returned by

- `show-addons`
- `show-modules`
- `show-notes`
- `show-services`
- `show-settings`
- `show-ui`

in one command.

Parameters / Options	Mandatory	Description	Allowed Values	Example
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Path to a repository file or to a deployed repository.	✓	<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_.... 	a valid path		<pre>xuml-tool dump-info . /hello_world.rep --format json-pretty -- include-passwords=0</pre>
--format		Specify in which format the information should be displayed.	human-readable	Display the results in a human-readable way. This format is not meant for any kind of automatic parsing. It may change anytime in the future.	
			json	Display the results in compressed JSON (default).	
			json-pretty	Display the results in pretty JSON.	
--include-passwords=1		Specify if passwords should be printed in clear text.	0	Hide passwords.	
			1	Display passwords (default).	

show-addons

xuml-tool 1.5.0 Display the add-ons used by the repository.

Parameters / Options	Mandatory	Description	Allowed Values		Example
Path to a repository file or to a deployed repository.	✓	<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_.... 	a valid path		<pre>xuml-tool show-addons . /hello_world.rep --format json-pretty</pre>
--format		Specify in which format the information should be displayed.	human-readable	Display the results in a human-readable way (default). This format is not meant for any kind of automatic parsing. It may change anytime in the future.	
			json	Display the results in compressed JSON.	


			js on - pr et ty	Display the results in pretty JSON.	
--	--	--	---------------------------------	--	--

Output

```
{
  "addons": [
    "Flows",
    "Functions",
    "XML_Function",
    "SOAP_AddOn",
    "REST_AddOn",
    "URL_AddOn",
    "JWT_AddOn",
    "Memory_AddOn",
    "Filesystem_AddOn",
    "LOG_AddOn",
    "JSON_AddOn",
    "Startup_AddOn",
    "PState_AddOn",
    "MongoDB_AddOn"
  ]
}
```

show-modules

xuml-tool 1.3.0 Display information on the modules inside the repository.

Parameters / Options	Mandatory	Description	Allowed Values		Example
Path to a repository file or to a deployed repository.		<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_.... 	a valid path		<pre>xuml-tool show-modules . /hello_world. rep --format json- pretty</pre>
--format		Specify in which format the information should be displayed.	human-readable	Display the results in a human-readable way (default). This format is not meant for any kind of automatic parsing. It may change anytime in the future.	
			json	Display the results in compressed JSON.	
			json-pretty	Display the results in pretty JSON.	


Output

```
{
  "modules": [
    {
      "compilationDate": "2021-09-03T11:00:12+02:00",
      "compilerVersion": "7.17.0",
      "name": "Idea_Management",
      "source": "Idea_Management.xml",
      "type": "composite",
      "version": "1.0.0"
    }
  ]
}
```

Output		Description	Values / Example	
modules		Array containing model details within this repository as an array element each.		
	compilationDate	Compilation timestamp.	"2021-10-04T09:37:05+02:00"	
	compilerVersion	Version of the xUML Compiler used for compilation.	"7.18.0-rc-9d5770a"	
	name	Name of the module.	"REST_AccessSupportManagerExample"	
	source	Name of the module source file.	"accessSupportManager.xml"	
	type	Module type.	composite	Module is a service composite.
			library	Module is a library.
	version	Module version.	"7.0.0"	

show-notes

xuml-tool 1.3.0 Display the documentation and model notes from a repository.

Parameters / Options	Mandatory	Description	Allowed Values		Example
Path to a repository file or to a deployed repository.		<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_.... 	a valid path		<pre>xuml-tool show-notes . /hello_world. rep --format json-pretty</pre>
--format		Specify in which format the information should be displayed.	human-readable	Display the results in a human-readable way (default). This format is not meant for any kind of automatic parsing. It may change anytime in the future.	
			json	Display the results in compressed JSON.	

Output


```
{
  "services": [
    {
      "endpoints": [
        {
          "descriptor": "/e2e.rest.descriptors/xUMLControllerService.xUML
Runtime API.yaml",
          "name": "xUML Runtime API",
          "path": "/api",
          "version": "1.2.0"
        }
      ],
      "name": "xUMLControllerService",
      "port": 21113,
      "type": "control"
    },
    {
      "endpoints": [
        {
          "descriptor": "/e2e.rest.descriptors/RESTService.
ConfigurationRest.yaml",
          "name": "ConfigurationRest",
          "path": "/rest/configuration",
          "version": "0.1.2"
        },
        {
          "descriptor": "/e2e.rest.descriptors/RESTService.IdeaProcessRest.
yaml",
          "name": "IdeaProcessRest",
          "path": "/rest/process/IdeaProcess",
          "version": "0.1.2"
        }
      ],
      "name": "RESTService",
      "port": 11113,
      "type": "rest"
    },
    {
      "endpoints": [
        {
          "name": "ConfigurationRest",
          "path": "/rest/configuration"
        },
        {
          "name": "IdeaProcessRest",
          "path": "/rest/process/IdeaProcess"
        }
      ],
      "name": "RESTService",
      "port": 51113,
      "type": "shadow",
      "wsdl": "/Idea_Management?wsdl"
    }
  ]
}
```

Output		Description	Values / Example
services		Array containing the service definitions within this repository as an array element each.	
	endpoints	Array of service endpoints (HTTP based services).	
	descriptor	Descriptor of the service (available for REST services only).	"/e2e.rest.descriptors/xUMLControllerService.xUML Runtime API.yaml"

name	Name of the service endpoint.	"xUML Runtime API"	
path	Path of the service endpoint.	"/api"	
version	Version of the service endpoint (available for REST services only).	"1.2.0"	
name	Name of the service as displayed in the Bridge UI.	"xUMLControllerService"	
port	Service port.	29035	
type	Service type.	unknown	Other service type than listed below. Service types that cannot be recognized by the xuml-tool will be listed as unknown.
		control	xUML Controller service.
		event_observer	Event observer service.
		http	HTTP service.
		java	Java service.
		jms	JMS listener service .
		jvm	JVM service for Java adapter.
		rest	REST service.
		sap	SAP service.
		scheduler	Scheduler service.
		shadow	SOAP shadow service for testing purposes.
		soap	SOAP service.
		timer	Timer service.
		xslt	XSLT service for XSLT adapter.
wsdl	Relative link to the WSDL file (SOAP services only).	/HelloWorldService?wsdl	

show-settings

xuml-tool 1.3.0Display all information on the settings of a repository.

Parameters / Options	Mandatory	Description	Allowed Values	Example
> Path to a repository file or to a deployed repository.		<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_.... 	a valid path	<pre>xuml-tool show-settings ./hello_world.rep --format json-pretty --include-passwords=1</pre>

--format		Specify in which format the information should be displayed.	human-readable	Display the results in a human-readable way (default). This format is not meant for any kind of automatic parsing. It may change anytime in the future.
			json	Display the results in compressed JSON.
			json-pretty	Display the results in pretty JSON.
--include-passwords=0		Specify if passwords should be printed in clear text.	0	Hide passwords (default).
			1	Display passwords.

Output

```
{
  "settings": [
    {
      "aliases": [
        "global_Idea_ManagementRoles::acme_manager",
        "G_IDEA_MANAGEMENTROLES_ACME_MANAGER"
      ],
      "category": "Global Settings",
      "defaultValue": "ceb466b0-4bd4-11e9-88ed-21f8a9cbbef8",
      "label": {
        "_": "Idea_ManagementRoles::acme_manager: "
      },
      "name": "G_IDEA_MANAGEMENTROLES_ACME_MANAGER",
      "schema": {
        "type": "string"
      },
      "section": "Settings / Deployment Macros"
    },
    {
      "aliases": [
        "global_IdeaProcess::holdTime",
        "G_IDEAPROCESS_HOLDTIME"
      ],
      "category": "Global Settings",
      "defaultValue": "PT60S",
      "label": {
        "_": "IdeaProcess::holdTime: "
      },
      "name": "G_IDEAPROCESS_HOLDTIME",
      "schema": {
        "type": "string"
      },
      "section": "Settings / Deployment Macros"
    },
    {
      "aliases": [
        "global_IdeaProcess::autoRetry",
        "G_IDEAPROCESS_AUTORETRY"
      ],
      "category": "Global Settings",
      "defaultValue": "false",
```

```

    "label": {
      "_": "IdeaProcess::autoRetry: "
    },
    "name": "G_IDEAPROCESS_AUTORETRY",
    "schema": {
      "type": "string"
    },
    "section": "Settings / Deployment Macros"
  },
  {
    "aliases": [
      "global_Idea_ManagementRoles::acme_employee",
      "G_IDEA_MANAGEMENTROLES_ACME_EMPLOYEE"
    ],
    "category": "Global Settings",
    "defaultValue": "4fda0960-18b4-11e9-a713-dblc180eef20",
    "label": {
      "_": "Idea_ManagementRoles::acme_employee: "
    },
    "name": "G_IDEA_MANAGEMENTROLES_ACME_EMPLOYEE",
    "schema": {
      "type": "string"
    },
    "section": "Settings / Deployment Macros"
  },
  {
    "aliases": [
      "addOn_RestTestToolCacheControl",
      "AO_RESTTESTTOOLCACHECONTROL"
    ],
    "category": "Add-Ons",
    "defaultValue": "max-age=2592000, public",
    "label": {
      "_": "Test Tool: Cache Control: value: "
    },
    "name": "AO_RESTTESTTOOLCACHECONTROL",
    "schema": {
      "type": "string"
    },
    "section": "REST HTTP Server"
  },
  {
    "aliases": [

"addOn_Services_Service_RESTService_JSONComposerOptions_writeTypeDiscrimina
tor",
      "AO_SRV_RESTSERVICE_JSONCOMPOSEROPTIONS_WRITETYPEDISCRIMINATOR"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
      "_": "RESTService: JSONComposerOptions: writeTypeDiscriminator"
    },
    "name":
"AO_SRV_RESTSERVICE_JSONCOMPOSEROPTIONS_WRITETYPEDISCRIMINATOR",
    "schema": {
      "type": "boolean"
    },
    "section": "REST Service Base"
  },
  {
    "aliases": [

"addOn_Services_Service_xUMLControllerService_JSONComposerOptions_writeType
Discriminator",
      "CTRL_JSONCOMPOSEROPTIONS_WRITETYPEDISCRIMINATOR"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
      "_": "xUMLControllerService: JSONComposerOptions:

```

```

writeTypeDiscriminator"
    },
    "name": "CTRL_JSONCOMPOSEROPTIONS_WRITETYPEDISCRIMINATOR",
    "schema": {
        "type": "boolean"
    },
    "section": "REST Service Base"
},
{
    "aliases": [

"addOn_Services_Service_xUMLControllerService_JSONComposerOptions_compact",
    "CTRL_JSONCOMPOSEROPTIONS_COMPACT"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
        "_": "xUMLControllerService: JSONComposerOptions: compact"
    },
    "name": "CTRL_JSONCOMPOSEROPTIONS_COMPACT",
    "schema": {
        "type": "boolean"
    },
    "section": "REST Service Base"
},
{
    "aliases": [
        "addOn_RESTService_Component_View.Composites.Idea_Management.
RESTService_Enabled",
        "AO_RESTSERVICE_IDEA_MANAGEMENT_RESTSERVICE_ENABLED"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
        "_": "RESTService: enabled: "
    },
    "name": "AO_RESTSERVICE_IDEA_MANAGEMENT_RESTSERVICE_ENABLED",
    "schema": {
        "type": "boolean"
    },
    "section": "REST Service Base"
},
{
    "aliases": [
        "addOn_RestDescriptorCacheControl",
        "AO_RESTDSCRIPTORCACHECONTROL"
    ],
    "category": "Add-Ons",
    "defaultValue": "no-cache",
    "label": {
        "_": "Descriptor: Cache Control: value: "
    },
    "name": "AO_RESTDSCRIPTORCACHECONTROL",
    "schema": {
        "type": "string"
    },
    "section": "REST HTTP Server"
},
{
    "aliases": [
        "addOn_Services_Service_xUMLControllerService_ResolveHostnames",
        "CTRL_RESOLVEHOSTNAMES"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
        "_": "xUMLControllerService: ResolveHostnames: "
    },
    "name": "CTRL_RESOLVEHOSTNAMES",
    "schema": {
        "type": "boolean"
    }
}

```



```

    },
    "section": "REST Service Base"
  },
  {
    "aliases": [
      "addOn_Services_Service_xUMLControllerService_Port",
      "CTRL_PORT"
    ],
    "category": "Add-Ons",
    "defaultValue": 21113,
    "label": {
      "_": "xUMLControllerService: Port: "
    },
    "name": "CTRL_PORT",
    "schema": {
      "type": "integer"
    },
    "section": "REST Service Base"
  },
  {
    "aliases": [
      "addOn_StateDB_UnicodeMode",
      "AO_STATEDB_UNICODEMODE"
    ],
    "category": "Add-Ons",
    "defaultValue": "Platform default",
    "label": {
      "_": "StateDB: Unicode Mode (Platform default | Unicode | non-
Unicode): "
    },
    "name": "AO_STATEDB_UNICODEMODE",
    "schema": {
      "type": "string"
    },
    "section": "SQL Adapter Connection"
  },
  {
    "aliases": [
      "addOn_SQLAuthorization_StateDB_DBPassword",
      "AO_STATEDB_PWD"
    ],
    "category": "Add-Ons",
    "defaultValue": "****",
    "label": {
      "_": "StateDB: DBPassword: "
    },
    "name": "AO_STATEDB_PWD",
    "schema": {
      "type": "password"
    },
    "section": "SQL Adapter Authorization"
  },
  {
    "aliases": [
      "addOn_SEI_HTTP_Service_MaximumConnections",
      "AO_SOAP_MAXIMUMCONNECTIONS"
    ],
    "category": "Add-Ons",
    "defaultValue": 50,
    "label": {
      "_": "MaximumConnections: "
    },
    "name": "AO_SOAP_MAXIMUMCONNECTIONS",
    "schema": {
      "type": "integer"
    },
    "section": "SOAP HTTP Server"
  },
  {
    "aliases": [
      "addOn_SOAP_AllowTracing",

```

```

        "AO_SOAP_ALLOWTRACING"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
        "_": "Allow Tracing (true/false): "
    },
    "name": "AO_SOAP_ALLOWTRACING",
    "schema": {
        "type": "boolean"
    },
    "section": "SOAP HTTP Server"
},
{
    "aliases": [
        "ALIAS_Persistent State_Database",
        "AL_PS_DATABASE"
    ],
    "category": "Add-Ons",
    "defaultValue": ":local:",
    "label": {
        "_": "Persistent State: Database: "
    },
    "name": "AL_PS_DATABASE",
    "schema": {
        "type": "string"
    },
    "section": "Persistent State"
},
{
    "aliases": [
        "addOn_core.dump.not-catched-errors_core.dump.catched-errors_core.
dump.catched-errors.code",
        "AO_DUMP_CAUGHT_ERRORS_CODE"
    ],
    "category": "Add-Ons",
    "defaultValue": "*",
    "label": {
        "_": "Caught Error Code (MY_CODE|*): "
    },
    "name": "AO_DUMP_CAUGHT_ERRORS_CODE",
    "schema": {
        "type": "string"
    },
    "section": "Dump Configuration"
},
{
    "aliases": [
        "addOn_StatedB_DBType",
        "AO_STATEDB_DBTYPE"
    ],
    "category": "Add-Ons",
    "defaultValue": "MySQL",
    "label": {
        "_": "StateDB: DB Type: "
    },
    "name": "AO_STATEDB_DBTYPE",
    "schema": {
        "type": "string"
    },
    "section": "SQL Adapter Connection"
},
{
    "aliases": [
        "ALIAS_Persistent State_Owner",
        "AL_PS_OWNER"
    ],
    "category": "Add-Ons",
    "defaultValue": "Idea_Management",
    "label": {
        "_": "Persistent State: Owner: "
    },

```

```

    },
    "name": "AL_PS_OWNER",
    "schema": {
      "type": "string"
    },
  },
  "section": "Persistent State"
},
{
  "aliases": [
    "addOn_Services_Service_RESTService_Port",
    "AO_SRV_RESTSERVICE_PORT"
  ],
  "category": "Add-Ons",
  "defaultValue": 11113,
  "label": {
    "_": "RESTService: Port: "
  },
  "name": "AO_SRV_RESTSERVICE_PORT",
  "schema": {
    "type": "integer"
  },
  "section": "REST Service Base"
},
{
  "aliases": [
    "global_IdeaProcess::autoRetryTime",
    "G_IDEAPROCESS_AUTORETRYTIME"
  ],
  "category": "Global Settings",
  "defaultValue": "PT60S",
  "label": {
    "_": "IdeaProcess::autoRetryTime: "
  },
  "name": "G_IDEAPROCESS_AUTORETRYTIME",
  "schema": {
    "type": "string"
  },
  "section": "Settings / Deployment Macros"
},
{
  "aliases": [
    "ALIAS_Persistent State_WorkerLimit",
    "AL_PS_WORKERLIMIT"
  ],
  "category": "Add-Ons",
  "defaultValue": "2",
  "label": {
    "_": "Persistent State: WorkerLimit: "
  },
  "name": "AL_PS_WORKERLIMIT",
  "schema": {
    "type": "string"
  },
  "section": "Persistent State"
},
{
  "aliases": [
    "addOn_StateDB_MaxConnectionReuse",
    "AO_STATEDB_MAXCONNECTIONREUSE"
  ],
  "category": "Add-Ons",
  "defaultValue": "1000",
  "label": {
    "_": "StateDB: Max Connection Reuse: "
  },
  "name": "AO_STATEDB_MAXCONNECTIONREUSE",
  "schema": {
    "type": "string"
  },
  "section": "SQL Adapter Connection"
},

```

```

{
  "aliases": [
    "addOn_Services_Service_xUMLControllerService_MaximumConnections",
    "CTRL_MAXIMUMCONNECTIONS"
  ],
  "category": "Add-Ons",
  "defaultValue": 50,
  "label": {
    "_": "xUMLControllerService: MaximumConnections: "
  },
  "name": "CTRL_MAXIMUMCONNECTIONS",
  "schema": {
    "type": "integer"
  },
  "section": "REST Service Base"
},
{
  "aliases": [
    "addOn_StateDB_ConnectionPooling",
    "AO_STATEDB_CONNECTIONPOOLING"
  ],
  "category": "Add-Ons",
  "defaultValue": "true",
  "label": {
    "_": "StateDB: Connection Pooling (true | false): "
  },
  "name": "AO_STATEDB_CONNECTIONPOOLING",
  "schema": {
    "type": "string"
  },
  "section": "SQL Adapter Connection"
},
{
  "aliases": [
    "addOn_SQLAuthorization_StateDB_DBUser",
    "AO_STATEDB_USER"
  ],
  "category": "Add-Ons",
  "defaultValue": "-",
  "label": {
    "_": "StateDB: DBUser: "
  },
  "name": "AO_STATEDB_USER",
  "schema": {
    "type": "string"
  },
  "section": "SQL Adapter Authorization"
},
{
  "aliases": [
    "addOn_StateDB_MaxConnectionAge",
    "AO_STATEDB_MAXCONNECTIONAGE"
  ],
  "category": "Add-Ons",
  "defaultValue": "15",
  "label": {
    "_": "StateDB: Max Connection Age (minutes): "
  },
  "name": "AO_STATEDB_MAXCONNECTIONAGE",
  "schema": {
    "type": "string"
  },
  "section": "SQL Adapter Connection"
},
{
  "aliases": [
    "addOn_Settings_ServerWorkerThreads",
    "AO_SETTINGS_SERVERWORKERTHREADS"
  ],
  "category": "Add-Ons",
  "defaultValue": "1",

```

```

"label": {
  "_": "ServerWorkerThreads: "
},
"name": "AO_SETTINGS_SERVERWORKERTHREADS",
"schema": {
  "type": "string"
},
"section": "SAP Global"
},
{
  "aliases": [
    "addOn_StateDB_MaxConnectionIdleTime",
    "AO_STATEDB_MAXCONNECTIONIDLETIME"
  ],
  "category": "Add-Ons",
  "defaultValue": "60",
  "label": {
    "_": "StateDB: Max Connection Idle Time (minutes): "
  },
  "name": "AO_STATEDB_MAXCONNECTIONIDLETIME",
  "schema": {
    "type": "string"
  },
  "section": "SQL Adapter Connection"
},
{
  "aliases": [
    "addOn_Services_Service_RESTService_MaximumConnections",
    "AO_SRV_RESTSERVICE_MAXIMUMCONNECTIONS"
  ],
  "category": "Add-Ons",
  "defaultValue": 50,
  "label": {
    "_": "RESTService: MaximumConnections: "
  },
  "name": "AO_SRV_RESTSERVICE_MAXIMUMCONNECTIONS",
  "schema": {
    "type": "integer"
  },
  "section": "REST Service Base"
},
{
  "aliases": [
    "addOn_Services_Service_RESTService_JSONComposerOptions_keepNulls",
    "AO_SRV_RESTSERVICE_JSONCOMPOSEROPTIONS_KEEPNULLS"
  ],
  "category": "Add-Ons",
  "defaultValue": false,
  "label": {
    "_": "RESTService: JSONComposerOptions: keepNulls"
  },
  "name": "AO_SRV_RESTSERVICE_JSONCOMPOSEROPTIONS_KEEPNULLS",
  "schema": {
    "type": "boolean"
  },
  "section": "REST Service Base"
},
{
  "aliases": [
    "global_getCompositeName"
  ],
  "category": "Global Settings",
  "defaultValue": "Idea_Management",
  "label": {
    "_": "getCompositeName: "
  },
  "name": "global_getCompositeName",
  "schema": {
    "type": "string"
  },
  "section": "Settings / Deployment Macros"
}

```

```

    },
    {
      "aliases": [
        "addOn_service_RESTService_RESTService_shadow_port",
        "AO_SSRV_RESTSERVICE_PORT"
      ],
      "category": "Add-Ons",
      "defaultValue": 51113,
      "label": {
        "_": "RESTServicePort: "
      },
      "name": "AO_SSRV_RESTSERVICE_PORT",
      "schema": {
        "type": "integer"
      },
      "section": "SOAP HTTP Server"
    },
    {
      "aliases": [
        "addOn_Services_Service_xUMLControllerService_JSONComposerOptions_keepNulls",
        "CTRL_JSONCOMPOSEROPTIONS_KEEPNULLS"
      ],
      "category": "Add-Ons",
      "defaultValue": false,
      "label": {
        "_": "xUMLControllerService: JSONComposerOptions: keepNulls"
      },
      "name": "CTRL_JSONCOMPOSEROPTIONS_KEEPNULLS",
      "schema": {
        "type": "boolean"
      },
      "section": "REST Service Base"
    },
    {
      "aliases": [
        "addOn_RESTService.IdeaProcessRest_Enabled",
        "AO_RESTSERVICE_IDEAPROCESSREST_ENABLED"
      ],
      "category": "Add-Ons",
      "defaultValue": "true",
      "label": {
        "_": "RESTService: IdeaProcessRest: enabled: "
      },
      "name": "AO_RESTSERVICE_IDEAPROCESSREST_ENABLED",
      "schema": {
        "type": "string"
      },
      "section": "SOAP HTTP Service Request"
    },
    {
      "aliases": [
        "addOn_Services_Service_RESTService_ResolveHostnames",
        "AO_SRV_RESTSERVICE_RESOLVEHOSTNAMES"
      ],
      "category": "Add-Ons",
      "defaultValue": true,
      "label": {
        "_": "RESTService: ResolveHostnames: "
      },
      "name": "AO_SRV_RESTSERVICE_RESOLVEHOSTNAMES",
      "schema": {
        "type": "boolean"
      },
      "section": "REST Service Base"
    },
    {
      "aliases": [
        "addOn_core.dump.not-catched-errors_core.dump.catched-errors",
        "AO_DUMP_CAUGHT_ERRORS"
      ],

```

```

    ],
    "category": "Add-Ons",
    "defaultValue": "false",
    "label": {
        "_": "Dump Caught Errors: enabled: "
    },
    "name": "AO_DUMP_CAUGHT_ERRORS",
    "schema": {
        "type": "string"
    },
    "section": "Dump Configuration"
},
{
    "aliases": [
        "addOn_Services_Service_RESTService_JSONComposerOptions_compact",
        "AO_SRV_RESTSERVICE_JSONCOMPOSEROPTIONS_COMPACT"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
        "_": "RESTService: JSONComposerOptions: compact"
    },
    "name": "AO_SRV_RESTSERVICE_JSONCOMPOSEROPTIONS_COMPACT",
    "schema": {
        "type": "boolean"
    },
    "section": "REST Service Base"
},
{
    "aliases": [
        "addOn_StateDB_DBName",
        "AO_STATEDB_DBNAME"
    ],
    "category": "Add-Ons",
    "defaultValue": "-",
    "label": {
        "_": "StateDB: DB Name: "
    },
    "name": "AO_STATEDB_DBNAME",
    "schema": {
        "type": "string"
    },
    "section": "SQL Adapter Connection"
},
{
    "aliases": [
        "addOn_SEI_HTTP_Service_ResolveHostnames",
        "AO_SOAP_RESOLVEHOSTNAMES"
    ],
    "category": "Add-Ons",
    "defaultValue": true,
    "label": {
        "_": "ResolveHostnames: "
    },
    "name": "AO_SOAP_RESOLVEHOSTNAMES",
    "schema": {
        "type": "boolean"
    },
    "section": "SOAP HTTP Server"
},
{
    "aliases": [
        "addOn_RESTService.IdeaProcessRest_URI"
    ],
    "category": "Add-Ons",
    "defaultValue": "/rest/process/IdeaProcess",
    "label": {
        "_": "RESTService: IdeaProcessRest: URI: "
    },
    "name": "addOn_RESTService.IdeaProcessRest_URI",
    "schema": {

```

```

        "type": "string"
    },
    "section": "SOAP HTTP Service Request"
},
{
    "aliases": [
        "addOn_core.dump.not-catched-errors",
        "AO_DUMP_UNCAUGHT_ERRORS"
    ],
    "category": "Add-Ons",
    "defaultValue": "true",
    "label": {
        "_": "Dump Not Caught Errors: enabled: "
    },
    "name": "AO_DUMP_UNCAUGHT_ERRORS",
    "schema": {
        "type": "string"
    },
    "section": "Dump Configuration"
},
{
    "aliases": [
        "addOn_RESTService.ConfigurationRest_Enabled",
        "AO_RESTSERVICE_CONFIGURATIONREST_ENABLED"
    ],
    "category": "Add-Ons",
    "defaultValue": "true",
    "label": {
        "_": "RESTService: ConfigurationRest: enabled: "
    },
    "name": "AO_RESTSERVICE_CONFIGURATIONREST_ENABLED",
    "schema": {
        "type": "string"
    },
    "section": "SOAP HTTP Service Request"
},
{
    "aliases": [
        "addOn_UILibraryPath_RestUILibraryCacheControl",
        "AO_UILIBRARYPATH_RESTUILIBRARYCACHECONTROL"
    ],
    "category": "Add-Ons",
    "defaultValue": "max-age=2592000, public",
    "label": {
        "_": "Library Cache Control: value: "
    },
    "name": "AO_UILIBRARYPATH_RESTUILIBRARYCACHECONTROL",
    "schema": {
        "type": "string"
    },
    "section": "REST HTTP Server"
},
{
    "aliases": [
        "addOn_RESTService.ConfigurationRest_URI"
    ],
    "category": "Add-Ons",
    "defaultValue": "/rest/configuration",
    "label": {
        "_": "RESTService: ConfigurationRest: URI: "
    },
    "name": "addOn_RESTService.ConfigurationRest_URI",
    "schema": {
        "type": "string"
    },
    "section": "SOAP HTTP Service Request"
},
{
    "aliases": [
        "addOn_Settings_DefaultConnectionPoolSize",
        "AO_SETTINGS_DEFAULTCONNECTIONPOOLSIZE"
    ]
}

```



```

    ],
    "category": "Add-Ons",
    "defaultValue": "10",
    "label": {
        "_": "DefaultConnectionPoolSize: "
    },
    "name": "AO_SETTINGS_DEFAULTCONNECTIONPOOLSIZE",
    "schema": {
        "type": "string"
    },
    "section": "SAP Global"
},
{
    "aliases": [
        "wsdl_host"
    ],
    "category": "Add-Ons",
    "defaultValue": "${server_hostname}",
    "label": {
        "_": "WSDL: host: "
    },
    "name": "wsdl_host",
    "schema": {
        "type": "string"
    },
    "section": "WSDL"
},
{
    "aliases": [
        "addOn_UILibraryPath_UILibraryCacheControl",
        "AO_UILIBRARYPATH_UILIBRARYCACHECONTROL"
    ],
    "category": "Add-Ons",
    "defaultValue": "max-age=2592000, public",
    "label": {
        "_": "Library Cache Control: value: "
    },
    "name": "AO_UILIBRARYPATH_UILIBRARYCACHECONTROL",
    "schema": {
        "type": "string"
    },
    "section": "SOAP HTTP UI Server"
},
{
    "aliases": [
        "global_Idea_ManagementRoles::acme_ceo",
        "G_IDEA_MANAGEMENTROLES_ACME_CEO"
    ],
    "category": "Global Settings",
    "defaultValue": "5c917b80-4b17-11e9-8833-5503b6d0e61f",
    "label": {
        "_": "Idea_ManagementRoles::acme_ceo: "
    },
    "name": "G_IDEA_MANAGEMENTROLES_ACME_CEO",
    "schema": {
        "type": "string"
    },
    "section": "Settings / Deployment Macros"
},
{
    "aliases": [
        "addOn_Settings_FieldPadding",
        "AO_SETTINGS_FIELDPADDING"
    ],
    "category": "Add-Ons",
    "defaultValue": "NEVER",
    "label": {
        "_": "FieldPadding: "
    },
    "name": "AO_SETTINGS_FIELDPADDING",
    "schema": {

```

```

        "type": "string"
    },
    "section": "SAP Global"
  },
  {
    "aliases": [
      "addOn_core.dump.not-catched-errors_core.dump.caught-errors_core.
dump.caught-errors.domain",
      "AO_DUMP_CAUGHT_ERRORS_DOMAIN"
    ],
    "category": "Add-Ons",
    "defaultValue": "*",
    "label": {
      "_": "Caught Error Domain (MY_DOMAIN|*): "
    },
    "name": "AO_DUMP_CAUGHT_ERRORS_DOMAIN",
    "schema": {
      "type": "string"
    },
    "section": "Dump Configuration"
  }
]
}

```

Output	Description	Values / Example
settings	Array containing the service settings as an array element each.	
aliases	Array of setting name aliases. This array also includes the name property (see below).	["addOn_RESTService. ConfigurationRest_Enabl ed", "AO_RESTSERVICE_CONFIGU RATIONREST_ENABLED"]
category	Setting category. In the Bridge UI, the setting sections (see below) are grouped by this category (see xUML Service Settings).	"Add-Ons"
defaultValue	Default value of the setting.	"true"
label_	Label of the setting in the Bridge UI (default language).	"RESTService: ConfigurationRest: enabled: "
name	External (friendly) name of the setting. Use this name to build the environment variable as described below (see xUML Service Settings).	"AO_RESTSERVICE_CONFIGU RATIONREST_ENABLED"
schema	Extended JSON schema of the setting type.	
type	Type of the setting. Possible types are: string, integer, boolean and password (masked string).	"string"
section	Setting section within a category (see above). All settings of a section are listed together in the Bridge UI (see xUML Service Settings).	SQL Adapter Authorization

show-ui

xuml-tool 1.3.0Display all information on UIs contained in a repository.

Parameters / Options	Mandatory	Description	Allowed Values	Example
----------------------	-----------	-------------	----------------	---------

Path to a repository file or to a deployed repository.	✓	<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_.... 	a valid path		<pre>xuml-tool show- seetings . /hello_world. rep --format json-pretty</pre>
--format		Specify in which format the information should be displayed.	h u m a n- r e a d a b l e	Display the results in a human-readable way (default). This format is not meant for any kind of automatic parsing. It may change anytime in the future.	
			js on	Display the results in compressed JSON.	
			js on - p r e t t y	Display the results in pretty JSON.	

Output

```
{
  "ui": [
    {
      "name": "index",
      "path": "/ui/index.html",
      "port": 11113
    }
  ]
}
```

Output	Description	Values / Example
ui	Array containing the UIs within this repository as an array element each.	
name	Name of the UI.	"index"
path	Relative path to the UI.	"/ui/index.html"
port	UI port.	11113

validate

xuml-tool 1.5.0Check the repository and report duplicate data items. This command is useful for support cases only.

Parameters / Options	Mandatory	Description	Allowed Values	Example
----------------------	-----------	-------------	----------------	---------

Path to a repository file or to a deployed repository.	✓	<ul style="list-style-type: none"> For repository files: Provide the path to the repository file to be analyzed. For deployed repositories: Provide the path to the service directory of the service to analyzed. Usually this will be a directory name starting with bridge_ 	a valid path	xuml-tool validate . /MongoDBAdapter_Customer Management_Example.rep --format json-pretty
--format		Specify in which format the information should be displayed.	human	Display the results in a human-readable way (default). This format is not meant for any kind of automatic parsing. It may change anytime in the future.
			json	Display the results in compressed JSON.
			json-pretty	Display the results in pretty JSON.
--tmp-files-policy		Specify whether to keep or remove temporary files used during the execution of this command.	leave	Keep the temporary files.
			remove	Remove the temporary files (default).

Output

```
{
  "data items": [
    {
      "dataItem": {
        "dataItemName": "identifiers",
        "dataItemNamespace": "http://e2e.ch/bridge/controller"
      },
      "instances": [
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.trace.configurations.:classifier.identifiers"
        },
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.trace.identifiers"
        }
      ]
    }
  ]
}
```

```

    ]
  },
  {
    "dataItem": {
      "dataItemName": "ArrayUtils",
      "dataItemNamespace": ""
    },
    "instances": [
      {
        "diff": [],
        "id": "urn:PAS_Platform.Utills.ArrayUtils"
      },
      {
        "diff": [],
        "id": "urn:xuml.utills.ArrayUtils"
      }
    ]
  },
  {
    "dataItem": {
      "dataItemName": "queryObjects",
      "dataItemNamespace": "http://e2e.ch/bridge/controller"
    },
    "instances": [
      {
        "diff": [],
        "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::Customer_Management.Customer_Management.queryObjects"
      },
      {
        "diff": [],
        "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::Customer_Management.Customer_ManagementImport.queryObjects"
      },
      {
        "diff": [],
        "id": "urn:xUML_Controller.xUML_Controller.pstate.queryObjects"
      }
    ]
  },
  {
    "dataItem": {
      "dataItemName": "raw",
      "dataItemNamespace": "http://e2e.ch/bridge/controller"
    },
    "instances": [
      {
        "diff": [],
        "id": "urn:xUML_Controller.xUML_Controller.trace.configurations.:classifier.identifiers.:id.raw"
      },
      {
        "diff": [],
        "id": "urn:xUML_Controller.xUML_Controller.pstate.objects.:objectId.raw"
      },
      {
        "diff": [],
        "id": "urn:xUML_Controller.xUML_Controller.pstate.events.:eventId.raw"
      }
    ]
  },
  {
    "dataItem": {
      "dataItemName": "object",
      "dataItemNamespace": "http://e2e.ch/bridge/controller"
    },
    "instances": [
      {
        "diff": [],

```

```

      "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_ManagementImport.object"
    },
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_Management.object"
    }
  ]
},
{
  "dataItem": {
    "dataItemName": "objectId",
    "dataItemNamespace": "http://e2e.ch/bridge/controller"
  },
  "instances": [
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.objects.
objectId"
    },
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_ManagementImport.objects.objectId"
    },
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_Management.objects.objectId"
    }
  ]
},
{
  "dataItem": {
    "dataItemName": "Utilities",
    "dataItemNamespace": ""
  },
  "instances": [
    {
      "diff": [],
      "id": "urn:Base_Components.Basic_Behavior.String.Utilities"
    },
    {
      "diff": [],
      "id": "urn:Data_Model.Service.Helper.Utilities"
    }
  ]
},
{
  "dataItem": {
    "dataItemName": "signals",
    "dataItemNamespace": "http://e2e.ch/bridge/controller"
  },
  "instances": [
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_Management.objects.:objectId.signals"
    },
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.objects.:
objectId.signals"
    },
    {
      "diff": [],
      "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_ManagementImport.objects.:objectId.signals"
    }
  ]
}
]

```

```

    },
    {
      "dataItem": {
        "dataItemName": "events",
        "dataItemNamespace": "http://e2e.ch/bridge/controller"
      },
      "instances": [
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.pstate.objects.:
objectId.events"
        },
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.pstate.events"
        }
      ]
    },
    {
      "dataItem": {
        "dataItemName": "objects",
        "dataItemNamespace": "http://e2e.ch/bridge/controller"
      },
      "instances": [
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_Management.objects"
        },
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.pstate.classes.urn::
Customer_Management.Customer_ManagementImport.objects"
        },
        {
          "diff": [],
          "id": "urn:xUML_Controller.xUML_Controller.pstate.objects"
        }
      ]
    },
    {
      "dataItem": {
        "dataItemName": "Process",
        "dataItemNamespace": ""
      },
      "instances": [
        {
          "diff": [],
          "id": "urn:xuml.configuration.Process"
        },
        {
          "diff": [
            {
              "op": "add",
              "path": "/Base~ldataItems/Array",
              "value": {
                "name": "startEvents",
                "type": "urn:xuml.configuration.StartEvent"
              }
            }
          ],
          {
            "op": "add",
            "path": "/Base~ldataItems/String",
            "value": {
              "name": "href"
            }
          }
        ],
        {
          "op": "add",
          "path": "/Base~ldataItems/content",
          "value": "\n  "
        }
      ]
    }
  ]
}

```

```

    }
  ],
  "id": "urn:Process_Tracing.Process"
},
{
  "diff": [
    {
      "op": "add",
      "path": "/Base~ldataItems/Array",
      "value": {
        "name": "startEvents",
        "type": "urn:xuml.configuration.StartEvent"
      }
    },
    {
      "op": "add",
      "path": "/Base~ldataItems/String",
      "value": {
        "name": "href"
      }
    },
    {
      "op": "add",
      "path": "/Base~ldataItems/content",
      "value": "\n  "
    }
  ],
  "id": "urn:ConfigurationService.ConfigurationRest.Rest.Process"
}
]
},
{
  "dataItem": {
    "dataItemName": "Security",
    "dataItemNamespace": ""
  },
  "instances": [
    {
      "diff": [],
      "id": "urn:xuml.bpmn.Security"
    },
    {
      "diff": [
        {
          "op": "remove",
          "path": "/Base~ldataItems/VirtualOperation"
        },
        {
          "op": "remove",
          "path": "/Base~ldataItems/content"
        },
        {
          "op": "remove",
          "path": "/Base~ldataItems/parent"
        }
      ],
      "id": "urn:Customer_ManagementService.Customer_ManagementRest.
Customer_Management.Security"
    },
    {
      "diff": [],
      "id": "urn:ConfigurationService.ConfigurationRest.Rest.
Configuration.Security"
    },
    {
      "diff": [
        {
          "op": "remove",
          "path": "/Base~ldataItems/Record"
        }
      ]
    }
  ]
}

```



```

        "op": "remove",
        "path": "/Base~ldataItems/content"
    }
},
    "id": "urn:ConfigurationService.ConfigurationRest.Security"
}
]
},
{
    "dataItem": {
        "dataItemName": "Customer_Management",
        "dataItemNamespace": ""
    },
    "instances": [
        {
            "diff": [],
            "id": "urn:Customer_Management.Customer_Management"
        },
        {
            "diff": [
                {
                    "op": "replace",
                    "path": "/Base~ldataItems/Record/name",
                    "value": "customer"
                },
                {
                    "op": "replace",
                    "path": "/Base~ldataItems/Record/type",
                    "value": "urn:Data_Model.Service.Customer"
                },
                {
                    "op": "replace",
                    "path": "/Base~ldataItems/String/name",
                    "value": "holdTime"
                },
                {
                    "op": "add",
                    "path": "/Base~ldataItems/String/defaultValue",
                    "value": "PT60S"
                },
                {
                    "op": "add",
                    "path": "/Base~ldataItems/Boolean",
                    "value": {
                        "defaultValue": "false",
                        "name": "autoRetry"
                    }
                },
                {
                    "op": "add",
                    "path": "/Base~ldataItems/DateTime",
                    "value": {
                        "name": "terminateAt"
                    }
                },
                {
                    "op": "add",
                    "path": "/Base~ldataItems/VirtualOperation",
                    "value": {
                        "component": "urn:Customer_Management.Customer_Management.
no_item_selected",
                        "id": "##no_item_selected$$1809553938",
                        "name": "no_item_selected"
                    }
                },
                {
                    "op": "add",
                    "path": "/Base~ldataItems/parent",
                    "value": "urn:Customer_Management.Customer_ManagementImport"
                }
            ]
        }
    ]
}

```

```
        "id": "urn:Customer_ManagementImplementation.Customer_Management.
Public.Customer_Management"
    }
  ]
}
}
```

xUML Service Settings

A service repository contains lots of tab files that describe the service. Concerning [xUML service settings](#), these tab files contain variable content that is substituted on deployment by default setting values.

Using the xuml-tool, you can overwrite those default by defining special environment variables on your system. The name format of these environment variables have to follow the following scheme: XUMLT_S_<setting id>.

<setting id> is the friendly id of a setting as displayed by the `show-settings` command, **settings.name** property of the output structure.

xuml-tool 1.5.0Also, you can replace the global variables by values provided from a file with option `--global-variables-file` on the `deploy` and on the `run` command.