Orchestration Server Deployment Guide

Enhanced Routing Script Options

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Contents

Enhanced Routing Script Options

Application Section

This section describes `Enhanced Routing Script` object Application section options.

alternate-url

Option section: `Application`

Configuration object: `Script object (CfgEnhancedRouting)`

Default value: none

Valid values: any valid URL

Value changes: For the next interaction that hits this resource

This option specifies the URL of the SCXML document to load. This is attempted if the value of the `url` option cannot be fetched or compiled (for example: application server is temporarily down, network error, script is malformed, and so on).

This is the option to use for `<callback> URI` functionality, as a failover mechanism to provision the SCXML application from an ORS Web Server.

The URL can be any one of the following protocols:

- `file:<path>`
- `http://<url>`
- `https://<url>`

The URL can also contain parameters which will be passed to the Application server. The values shown below are substituted at run-time based on the information in the interaction.

Parameter Element Descriptions

- `[DNIS]` The `DNIS` attribute of the interaction
- `[ANI]` The `ANI` attribute of the interaction
- `[DN]` The `ThisDN` attribute of the interaction
- `[CED]` The `CollectedDigits` attribute of the interaction
- `[EMAILFROM]` E-mail from address
- `[EMAILTO]` E-mail to address

- [EMAILSUBJECT] E-mail subject
- [UDATA] Expanded to the entire user data of the interaction in the format: name1=value1&name2=value2&…
- [UDATA.*] Expanded to the entire user data of the interaction in the format:name1:value1,name2:value2,…
- [UDATA.name] Expanded to the value of a specific user data key of the interaction value. For example: &servicetype=[UDATA.ServiceType] could resolve to &servicetype=CreditCards

Simple case

```
alternate-url = http://xserver.genesyslab.com:80/NewCallReq.asp<br>
```

With parameters:

```
alternate-url =  https://xserver.genesyslab.com:80/
NewCallReq.asp?ani=[ANI]&dnis=[DNIS]&servicetype=[UDATA.ServiceType]
```

Parameter Substitution

Orchestration Server allows substitution of parameters, provided in the URL of an SCXML application, with predefined values. There are several ways to utilize this functionality.

- Configure parameters in an Enhanced Routing Script object in Configuration Layer. The URL of the SCXML application specified in the url option or alternate-url option may contain parameters in the format $$parameter-name$$ where parameter-name should match the name of the option configured in the ApplicationParms section. When this parameter-name is found, the parameter will be substituted for its value. For example, configure the following options in the ApplicationParms section:

  ```
  APPSERVER1=http://appserver:8080
   REGION1=CA
   REGION2=NY
  ```

- Configure the url and alternate-url options in the Application section:

  ```
  url=$$APPSERVER1$$/service/$$REGION1$$/Workflow1.scxml
   alternate-url=$$APPSERVER1$$/service/$$REGION2$$/Workflow2.scxml
  ```

  The url will be substituted at run-time with:

  ```
  http://appserver:8080/service/CA/Workflow1.scxml
  ```

  The alternate-url will be substituted at run-time with:

  ```
  http://appserver:8080/service/NY/Workflow2.scxml
  ```

- Sessions started using an HTTP request with parameters. For example:

  ```
  http://localhost:17011/scxml/session/start?
   src=http://appserver:8080/service/CA/
   Workflow1.scxml&APPSERVER1=http://appserver:8080®ION1=CA
  ```

  These parameters can be utilized in a started SCXML application as a value of the hrfattribute in an <xi:include> action element. For example:

```
<xi:include href="$$APPSERVER1$$/service/$$REGION1$$/RouteToAgGroup.scxml" …/>
```

At run-time, the `href` value will be substituted with:

```
"http://appserver:8080/service/CA/RouteToAgGroup.scxml"
```

- Session started with parameters specified in `<session:start>` action element. For example:

```
<session:start sessionid="_data.NewID" src="_data.Path + '/Workflow1.scxml'" >
 <param name="APPSERVER1" expr="'http://appserver:8080'"/>
 <param name="REGION1" expr="'CA'"/>
 </session:start>
```

Notes:

- Orchestration Server now sends the `HTTP fetch` request to the address specified in the `alternate-url` option after the `fetch-timeout` has expired.
- `parameter-name` can be used in all subroutines started from the main SCXML session. To avoid unexpected outcomes, Genesys recommends avoiding a `parameter-name` with a space at the beginning, end, or in the middle. `parameter-name` is case-sensitive.

</toggledisplay>

fetch-timeout

Option section: `Application` in an Enhanced Routing Script object

Configuration object: `Enhanced Routing Script object`

Default value: `5000`

Valid values: Any integer greater than `0`

Value changes: After restart

This option specifies the time (in milliseconds) before a document fetch operation is abandoned. If the SCXML document cannot be retrieved within this timeout value, the fetch operation is abandoned and a fetch operation for the `alternate-url` is attempted.

Orchestration Server sends the `HTTP fetch` request to the address specified in the `alternate-url` option after `fetch-timeout` has expired.

http-useragent

Option section: `Application`

Configuration object: `Script object (CfgEnhancedRouting)`

Default value: `GOES/8.0`

Valid values: Any string

Value changes: For the next document fetch

Specifies the value of the `User-Agent` header that ORS includes into originating HTTP requests that it sends when fetching an SCXML document (script) from an application server. For example: `http-User-Agent = MYAGENT`

http-version

Option section: `Application`

Configuration object: `Script object (CfgEnhancedRouting)`

Default value: `1.1`

Valid values: `1.0, 1.1`

Value changes: For the next document fetch

This option specifies the HTTP version to use when fetching an SCXML document from an application server.

For example: `http-version = 1.1`

max-age

Option section: `Application`

Configuration object: `Script (CfgEnhancedRouting) object`

Default value: `0`

Valid values: Any integer greater than or equal to `0`

Value changes: For the next change of the SCXML document

Defines time in seconds for how long a fetched SCXML application is cached. When the same SCXML application is to be used for the new session within the configured timeout, the cached version of the document will be used instead of fetching it from the application server.

- If the option value is empty or set to `0`, fetching this document from the cache will be disabled.
- If `max-age` is configured for an Enhanced Routing Script object, the value from `max-age` takes precedence over the `http-max-age` Application level option.
- If the URL of SCXML application contains parameters that are unique for each invocation, then the application will be fetched each time regardless of the option value.

max-stale

Option section: `Application`

Configuration object: `Script (CfgEnhancedRouting) object`

Default value: `0`

Valid values: Any integer greater than or equal to `0`

Value changes: For the next fetch of the SCXML document

Defines the time in seconds to extend the lifetime of a cached SCXML application. For example, if the value of the `max-age` option is set to 60 seconds and the value of the `max-stale` option is set to 30 seconds, then the fetched document will be cached for the timeframe of 90 seconds.

- If the option value is empty or set to `0`, fetching this document from the cache will be disabled.
- If `max-stale` is configured for an Enhanced Routing Script object, the value from `max-stale` takes precedence over the `http-max-stale` Application level option.

url

Option section: `Application`

Configuration object: `Script (CfgEnhancedRouting) object`

Default value: none (this is a required option)

Valid values: any valid URL

Value changes: For the next interaction that hits this resource

This option specifies the URL of the SCXML document to load. The URL can be any one of the following protocols:

- `file:<path>`
- `http://<url>`

The URL can also contain parameters which will be passed to the Application server. The values shown in Parameter Element Descriptions below are substituted at run-time based on the information in the interaction.

Parameter Element Descriptions

- `[DNIS]` The `DNIS` attribute of the interaction
- `[ANI]` The `ANI` attribute of the interaction
- `[DN]` The `ThisDN` attribute of the interaction
- `[CED]` The `CollectedDigits` attribute of the interaction
- `[EMAILFROM]` E-mail from address
- `[EMAILTO]` E-mail to address
- `[EMAILSUBJECT]` E-mail subject
- `[UDATA]` Expanded to the entire user data of the interaction in the format: `name1=value1&name2=value2&…`
- `[UDATA.*]` Expanded to the entire user data of the interaction in the format:`name1:value1,name2:value2,…`

- `[UDATA.name]` Expanded to the value of a specific user data key of the interaction value. For example: `&servicetype=[UDATA.ServiceType]` could resolve to `&servicetype=CreditCards`

For example:

`url = http://xserver.genesyslab.com:80/NewCallReq.asp`

```
url = http://xserver.genesyslab.com:80/
NewCallReq.asp?ani=[ANI]&dnis=[DNIS]&servicetype=[UDATA.ServiceType]
```

Orchestration Server allows substitution of parameters, provided in the URL of an SCXML application, with predefined values. For more information, see the `alternate-url` option.

{Parameter Name}

Option section: `ApplicationParms`

Configuration object: `Script object (CfgEnhancedRouting)`

Default value: none

Valid values: Any string

Value changes: For the next interaction that hits this resource

This option specifies a string that represents a parameter value to be passed to the application.

The `ApplicationParms` section contains the values for data elements that may be referred to within the SCXML application. The parameters can be statically defined for each application (for example, `Service = Sales`) or contain substitution values that will be substituted at run-time based on the information in the interaction.

For example: `Segment = [UDATA.CustomerSegment]`

Parameter Element Descriptions

- `[DNIS]` The `DNIS` attribute of the interaction
- `[ANI]` The `ANI` attribute of the interaction
- `[DN]` The `ThisDN` attribute of the interaction
- `[CED]` The `CollectedDigits` attribute of the interaction
- `[EMAILFROM]` E-mail from address
- `[EMAILTO]` E-mail to address
- `[EMAILSUBJECT]` E-mail subject
- `[UDATA.name]` Expanded to the value of a specific user data key of the interaction value. For example: `&servicetype=[UDATA.ServiceType]` could resolve to `&servicetype=CreditCards`

For example:

`ApplicationParms =`

```
Service = Sales
EmailSubject = [EMAILSUBJECT]
Segment = [UDATA.CustomerSegment]
AppServer = http://myappserver:8080
```