MEMO

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Subject	The "pssession" URI scheme

1. Purpose

Protomation develops Operator Training Simulators (OTS) for customers in the (petro)chemical industry. These customers need a scheme name that can be used for starting a (simulation) training session in Process Studio from a webpage, without fear of conflicts with future schemes. The scheme "pssession" is hereby registered as a "permanent" scheme for that purpose.

2. Scheme syntax

Since we are experimentally rolling out the protocol handler in our software for this scheme, the syntax is subject to change, without backwards compatibility. The current syntax of the pssession-scheme is:

pssession:<sessionuri>[?query]

sessionuri: URI for Process Studio Session, as path of the pssession URI
querystring: Optional parameters for Learning Record Store (LRS) uplink

Session URI:

The session URI references a resource that describes training session configuration.

The current implementation of our protocol handler only supports a session URI with the file-scheme, referencing a session file (.pssession) that is expected on the local computer
(e.g. file:///C:\ProgramData\Process Studio\Session\StartScript.pssession).

We are thinking about adding support for the http-scheme and https-scheme in our protocol handler, for referencing a session file (.pssession) on a webserver.
(e.g. https://somewebsite.com/session/startscript.pssession)

Towards the future, we want to implement a (Windows) server application that runs the session on behalf of a (cross-platform) thin client application. In this case we may define and use a new kind of scheme, that is a virtual reference to or description of a session on the server.

Query:

The query may contain the following parameters, for supporting an Learning Record Store (LRS) uplink and / or informing about the current actor.

Parameters	Value	Required / Optional
actor	JSON value describing xAPI actor.	Optional
endpoint	xAPI endpoint of LRS.	Optional
sessionid	GUID for identifying the current session, used as the registration value of the xAPI context object.	Only required if endpoint also specify.
auth	Authentication string for endpoint. At this moment only HTTP Basic Authentication is supported.	Optional

3. Scheme semantics

URIs in the "pssession" scheme are to be used with Process Studio software only.

4. Encoding considerations

Process Studio only supports ANSI encoding at the moment, but support for Unicode is planned fort he future, following these guidelines: http://utf8everywhere.org/

5. Interoparibility considerations

The xAPI-related values and objects in the query string must comply with the xAPI specification. See: https://github.com/adlnet/xAPI-Spec

6. Security considerations

At this moment a basic authentication token is passed to Process Studio, since the Learning Record Store market has not adopted the OAuth2 standard yet. For the moment, using basic authentication with an xAPI launch server is secure enough. See: https://github.com/adlnet/xapi-launchhttps://tools.ietf.org/html/rfc7595#section-8