Documentation of the Assistant module "Presenter Service "

FKE

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1 Description

The Presenter Service is the Link between connected clients and the data models of the KPUs. Upon KPUs sending updates for their models, those updates will be linked to the connection information of the listening clients so that External Communication can forward the model updates to the listening clients.

Client - Model subscription After a client has received and installed a KPU package it can then subscribe to that KPU's stream of model update notifications. It does so by sending the request to the External Communication which forwards it to the Presenter Service that keeps track of all the Client - Module subscriptions. For each KPU model there can be multiple listening Clients and upon model update, each of them will get notified with a copy of that model update.

Model Update forwarding Given that a KPU's model has a number of subscribers >0, upon an incoming model update, Presenter Service will prepare a message for External Communication which contains the original model update with the connection information of all the subscribed clients for that model. External Communication will then broadcast that model update upon all the subscribed clients. The advantage of this is that up until reaching External Communication, only one set of model updates has been sent from service to service which only then has to be "copied" for each Client.

2 Installation

Presenter Service is installed by deploying it within the Service Fabric Cluster Application "Assistant".

3 Configuration

To configure the service's logging, one can alter the Nlog.xml to switch to a different target / layout.[1]

4 Dependencies

Presenter Service can only be of functional use if Model Updates are routed through it to clients, e.g. via Black Board and Core Service Presenter Service requires the following libraries additionally to the ones available via public

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[1]`https://github.com/nlog/NLog/wiki/Configuration-file`

Nuget server (alternatively if sources are available, direct dependencies to the libraries can be used):

- BreanosConnectors.Kpu.Communication.Common

- BreanosConnectors.SerializationHelper

5 Requirements

Presenter Service requires an accessible External Communication service to send model updates to. Presenter Service is required to be running before any KPUs are activated so as to be able to receive their registration attempts.