Documentation of the Assistant module "Access Control "

FKE

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1 Description

Access Control (AC) is a Service Fabric Aplication (SFA) that can store and handle user credentials and permission information in relationship to users / user groups. AC is built modularly, encapsulating the information providers provider (currently user authentication and client menu generation) into its own component so it can be exchanged more easily. At present, only the Breanos Identity Provider is implemented as Identity Provider which uses an Entity Framework database model to persist and provide user identity information and grouping in an SQL database. Furthermore, AC holds a Menu Provider, in a similar fashion to the Identity Provider, which is used for pre-processing KPU-defined menus into a menu structure usable by the client software to render the available menu options. Interfacing with AC works via SFA Remoting over the interface AccessControlService.Interfaces.IAccessControlService which provides Getter- and Setter- methods for the various different sets of data.

2 Installation

Access Control is to be installed on a Service Fabric Cluster and runs as a stateless service on a configurable number of nodes.

3 Configuration

AC can be configured along with its sub modules (Identity Provider and Menu Provider) AC has a file called "settings.xml" located in ./PackageRoot/Config/ which contains the parameter values for each of its components. AC itself can be configured by defining which Identity Provider / Menu Provider to use. If a new component is being added, AC itself must be adapted accordingly:

- The new module must be added to AC's dependencies
- AC's source code must be adapted to recognize the relevant settings and setting-values for use of the new module
- Settings.xml itself can be added to change use from the old module to the new one (e.g. switch from BreanosIdentityProvider to ActiveDirectoryIdentityProvider)

AC and its currently implemented components can further be configured by providing a connection string for the SQL database to use for storage and retrieval of the user data.

4 Dependencies

AC requires the following libraries additionally to the ones available via public Nuget server (alternatively if sources are available, direct dependencies to the libraries can be used):

- AccessControlService.Data
- AccessControlService.Interfaces
- BreanosConnectors.Kpu.Communication.Common
- BreanosConnector.SerializationHelper.Standard
- BreanosIdentitiyProvider
- IdentityProvider.Interfaces
- MenuProvider.Interfaces
- WpfMenuProvider

5 Requirements

AC uses database connections during its normal operation. Some components of AC may store log information in a database.