General Description

AXIS Mobile Access Server 1.0

API’s

Document Revision: 1.0

Content

1 Introduction

By providing a platform with a set of APIs and an SDK to third parties, the AXIS Mobile Access Server enables integration of other applications. Application developers can take advantage of information such as physical location to enhance value-added, tailored proximity services. The Axis Mobile Access Server also features comprehensive interfaces to billing and customer care systems.

Described here is the functionality in the first verison of the AXIS Mobile Access Server, 1.0. Additions to these interface are being developed and will be included in future releases. Unique adaptions for specialised integration with external systems can be ordered as extra features.

2 Positioning Interface

The positioning module provides the possibility to retrieve the position of a user, as well as subscribe to changes of a users position.

The positioning component is based on web technology, which simplifies integration for web developers. Requests to the positioning module are made through simple GET operations using HTTPS as the communication protocol. Results are in XML format.

When retrieving the current position of a user, the user can either be specified by username or by current IP. Positioning information is given as co-ordinates or zone. Co-ordinates and zone for each access point are defined by the administrator in the AXIS Mobile Access Server network management interface

A zone is a symbolic name denoting the context where an access point (and the users) is situated. For example: VIP_lounge.terminal5.ohare_international.Chicago.US. A zone may be divided into sub-zones, if needed, making up a hierarchy.

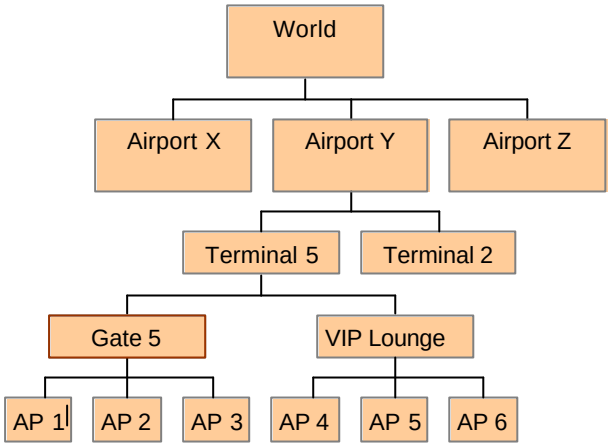

Figure 1. Example of a zone tree.

A subscription of events in a zone will cause a notification to be sent when something happens in a zone (or in its sub zones in the zone tree). Events can be user login or logout. A subscription to user events will cause a notification to be sent when the user logs in and out (the user can choose to disable this in his/her profile).

To assist developers in using the positioning interface, a SDK (System Developers Kit) containing Java classes has been created (Perl classes will be added in future releases).

A detailed description of request format, parameters and configuration of the positioning module of the Mobile Access Server is available as separate documentation.

3 Billing System Interface

The AXIS Mobile Access Server 1.0 generates usage data files and stores these in the local file system. These files can be accessed and downloaded using File Transfer Protocol (FTP). (A "pull interface" towards billing systems will be implemented in future releases of the AXIS Mobile Access Server.)

As default the MAS generates usage data for six usage events:

- Session established
- Session terminated
- Positioning request successful
- Positioning subscription successful
- Zone information delivered
- User information delivered

Other usage events can be enabled.

Usage data files are by default formatted in the IPDR1.1-format. IPDR is an emerging new standard format for billing generation based on IP traffic. For more info on IPDR, see www.ipdr.org.

A detailed description of data retrieval, record formats and configuration of the billing module of the Mobile Access Server is available as separate documentation.

4 Customer Care System Interface

In the AXIS Mobile Access Server 1.0, the Customer Care component provides the possibility to add a user account, remove an account and modify an account.

The positioning component is based on web technology. Since most applications using the component are based on web technology, this makes it easy to access for web developers. Requests to the positioning module are made through simple GET) operations using HTTPS as the communication protocol.

Each request must be authenticated using a login parameter and a password parameter. The response will return the status of the corresponding request operation. Requests implemented in the 1.0 version of the AXIS Mobile Access Server are:

- Adding an account
- Remove account
- Modify an account
- Add access profile
- Remove access profile
- List access profiles
- Add positioning preference
- Remove positioning preference
- List sessions
- View session

In additon to this, customer accounts can be added and removed in batches, for fast and easy user management.

A detailed description of data attributes, return codes, request and response formats and configuration of the customer care system interface is available as separate documentation.