

# 360Provisioning

Orchestration and  
Provisioning Middleware



### **360Provisioning**

#### *Orchestration and Provisioning middleware*

Scalable, Modular and Versatile, 360Provisioning is the dynamic interface between many of today's activation platforms and bespoke downstream provisioning systems (such as Digital TV Conditional Access System platforms).

MSOs can now benefit from integrating the best in class provisioning technology through a straight forward one-time install.

360Provisioning performs critical functions within the provisioning chain together with a powerful decision support based rules engine.

And by choosing 360Provisioning, MSOs can have a one touch view of their customers through a single browser interface.

### **360Provisioning FEATURES**

- Qualifies, translates and verifies activation requests received from (typically) one or more billing and customer support systems in a cost effective, efficient and secure manner.
- Delivers translated messages to any single or multiple downstream downstream systems in any format required.
- Full historical audit trail of each provisioning request through a browser based management console.
- Assured - 24/7 with no lost requests, even in unplanned downtime.
- Surge - protects the downstream system from heavy traffic spikes through dynamic throttling.
- Queues - allows operations staff to give priority to specific request types.
- Application control through a browser based management console.

### **TECHNICAL DETAILS**

The 360Provisioning platform uses the best of open source Java technologies and adheres to many industry standards. It works with a variety of application servers and databases and provides web services for a SOA solution.

360Provisioning is a 100% pure Java application written to the Java JDK 1.5+ and implemented using a three layer architecture comprising Core and Blade extensions.

360Provisioning implements the industry standard XML protocol for inbound provisioning requests. A sophisticated rules and decision engine translates provisioning requests into the physical API calls necessary to provision service.

360Provisioning rules and decisions engine allows each 360Provisioning installation to be fully customized to meet each MSO's unique product set and provisioning requirements.

360Provisioning provides a highly optimized XML based extensible programming language, based around the rules and decision engine, which is pre-compiled during 360Provisioning startup for maximum processing performance.

360Provisioning rules and decisions are defined using sophisticated programming constructs including conditional statements, branching, data mapping and translation operations.

360Provisioning architecture is designed to allow pluggable input and output connectors to provide the flexibility to interface to any and all types of external interface protocols and API requirements. Custom connectors can be quickly, easily and cost effectively implemented and integrated into 360Provisioning.

Full database journaling of all provisioning requests is performed to ensure a complete audit capability and to provide detailed data views for use with 360Provisioning Manager.

A telnet command interface allows extensive management and control of 360Provisioning. Public web services are also provided to allow third-party client applications to perform similar control operations.

360Provisioning provides full multi-threading, queuing and asynchronous processing of transactions to ensure high performance, while queuing and asynchronous processing also provide transaction throttling to match the transaction processing capabilities of external interfaces. Through the telnet and web services interfaces it is possible to dynamically stop, start and pause processing threads and queues.

360Provisioning Manager is a full browser based GUI application running on the industry standard Tomcat and GlassFish web servers. It interfaces to 360Provisioning through the 360Provisioning public web services layer and provides full application control and rich transaction analysis, monitoring and diagnostic tools.

360Provisioning Monitor performs system health checks for database connectivity, 3rd party system availability, alert queue monitoring, and memory usage. A GUI dashboard and traffic lights provide highly visual feedback on system status.

360Provisioning Alert System provides configurable alerts delivered as emails, SMS text messages, SNMP traps, JMS MQ and NetCool alerts.

#### OPERATING PLATFORMS

- Sun Solaris Version 9.x and 10.x.
- Windows Server 2003+
- Linux
- AIX / HP-UX

#### ARCHITECTURE

- 100% Java JDK 1.5+ based
- Pluggable Input and Output connector Blades
- SOA web services and web services supervisor
- Tomcat and Glassfish web server
- Browser based GUI Manager
- Hot standby for failover – in plan

#### DATABASES

- Oracle 10g / 11g – single cluster and multi-cluster
- DB/2
- SQLServer – in plan
- Informix – in plan

#### PROTOCOLS AND INTERFACES

- XML
- SOA web services
- telnet

#### 360Provisioning **MANAGER**

- Start and Stop 360Provisioning
- Start, stop and pause transaction queues
- Smartcard/Set Top Box pairing history
- Customer pairing history
- Reports failed, killed and rejected provisioning transactions
- CAS API call history
- Transaction search capability
- 360Provisioning user management (create user, edit user, authorize user)

#### 360Provisioning **MONITOR**

- Database connectivity
- 3rd party system connectivity
- Memory usage
- Queue statistics
- Traffic lights
- Performance Dashboard

#### 360Provisioning **ALERTS**

- email
- SMS text
- SNMP 2.0 traps
- JMS MQ
- NetCool

#### ABOUT ZENTIVE

Zentive is a leading independent software platforms provider and integration business, helping Communication Services Providers become more agile and dynamic through the use of its specialist know how.

#### CONTACT

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