

# Aperi Directions for R0.5 – Single sign on and Launch In Context

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# Agenda

- What is Single Sign on
- What is Launch In Context
- Launch
- Passing Parameters
- Framework

# What is Launch In Context

- A way to integrate otherwise unrelated managements applications
  - Producers: advertise capabilities
  - Consumers: integrate capabilities at key launch points
- Enables applications to leverage each others strengths
  - The SRM can invoke a Vendor Provided Management Application (VPMA)
- Simplifies complex tasks for end user

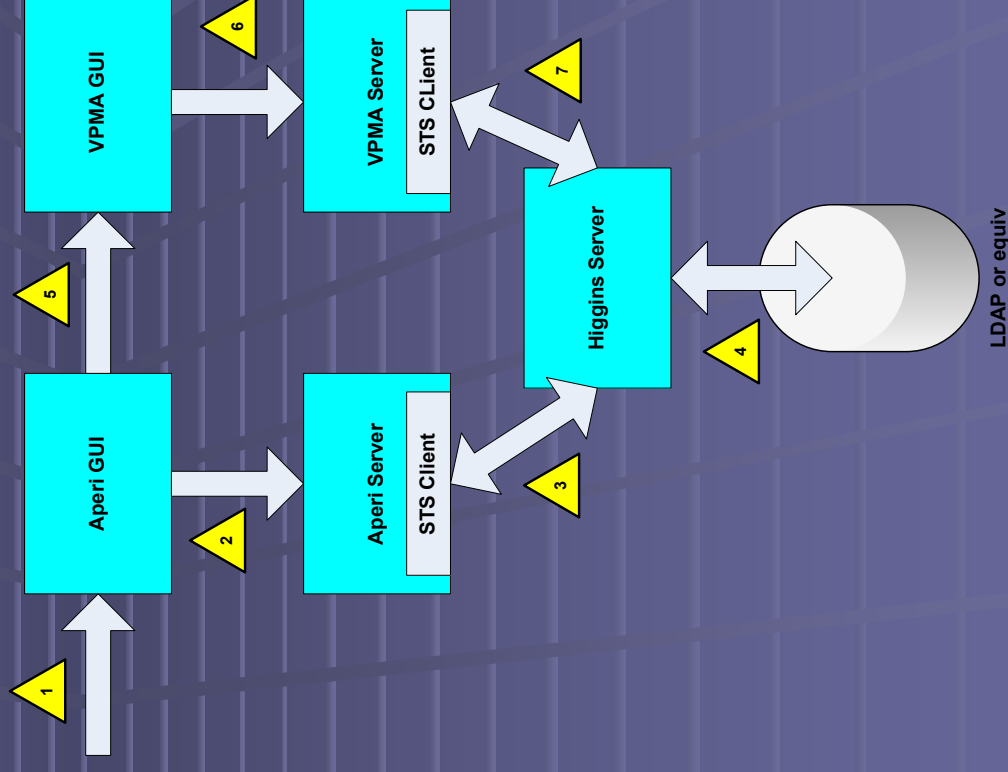
# Single Sign On

- Web
  - Basic Authentication (Web Browser)
    - User ID/Password 'encoded' in header
  - Form Authentication
  - Token Authentication
- Application
  - Pass On Command Line
  - Socket for Communication
- User Repository
  - Separate (Each Application authenticates to individual user store)
  - Central (All applications authenticate against common user store)

# Single Sign On with STS Client

## Sequence

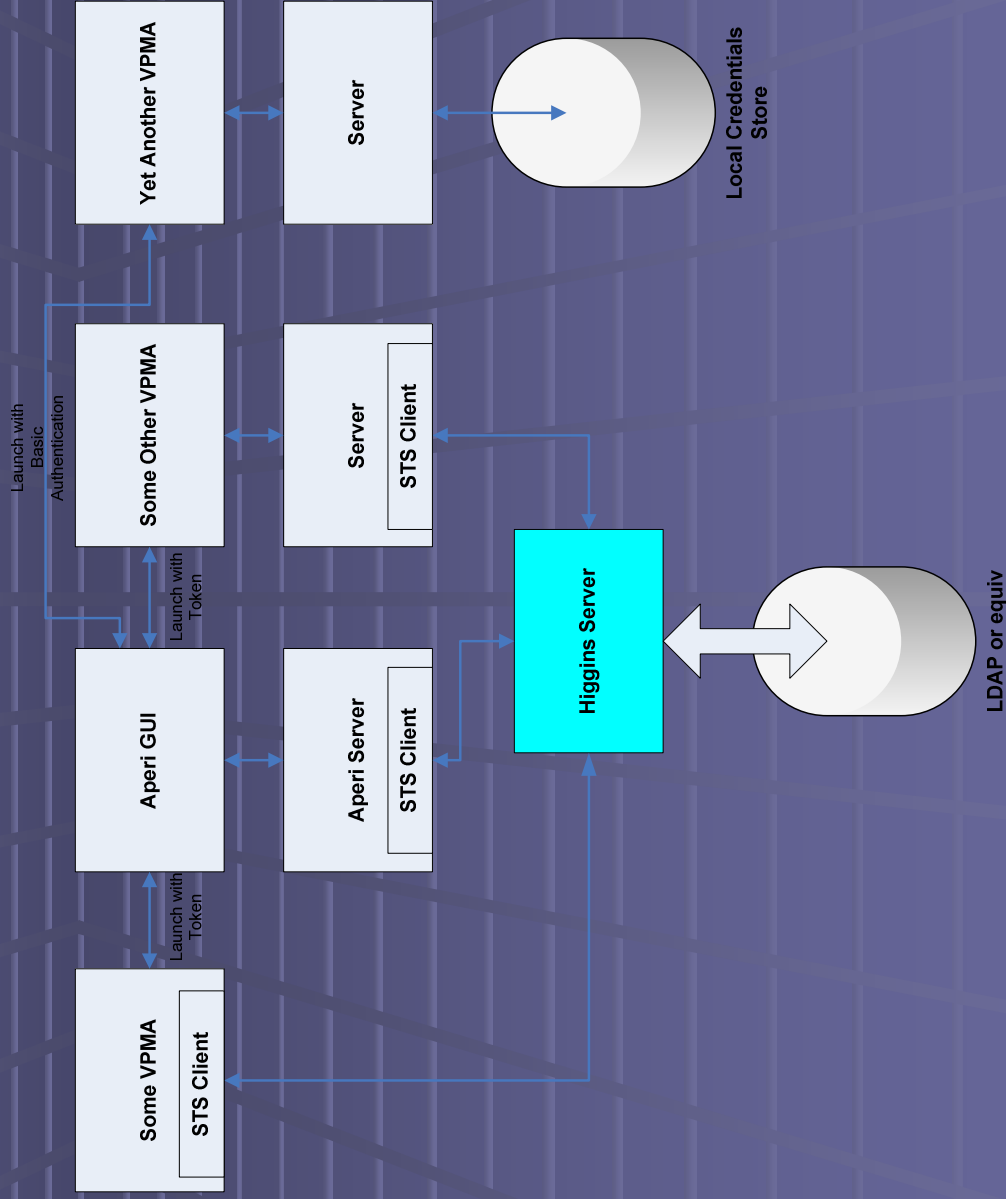
1. User Logs into Aperi
2. Aperi GUI sends user ID/Password information to Server to authenticate
3. Aperi uses STS Client to authenticate user
4. STS gets user information from LDAP repository and generates a token
5. Aperi GUI launches VPMA and sends the token
6. VPMA retrieves token and sends to server
7. Server uses STS Client to authenticate token with Higgins Server and get role information (groups) for the user



# Security Service

- Common security service to
  - Authenticate usersids and password
    - Encapsulate LDAP server
  - Token passed between applications
    - STS Tokens.
  - Provide User and Group information
    - Validate user – identify groups for user
- Future Enhancements
  - Authorization
    - Determine if function can be performed based on user Role
  - Audit logging
- Client
  - STS Client – Open Source client based on Higgins
  - See: [http://wiki.eclipse.org/Security\\_Token\\_Service](http://wiki.eclipse.org/Security_Token_Service)
  - What is Higgins? See: <http://www.eclipse.org/higgins/>

# Higgins Environment



# What is Launch In Context

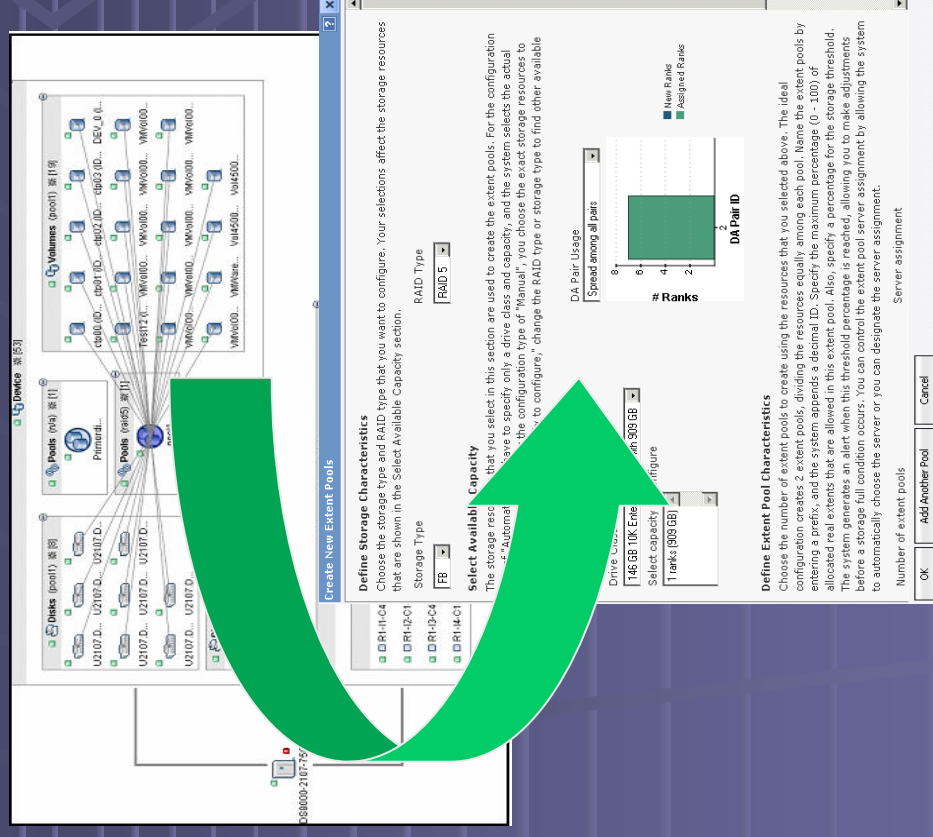
- Launch
  - Select an Object, Open a Menu, Invoke an Application
- Single Sign On
  - Pass User Credentials to a Launched Application so user can bypass login dialogs
- Passing Parameters
  - Launch an Application and jump to a particular screen in the console based on the context
  - E.g. Launch to a 'Create Storage Pool' wizard for a subsystem



# Launch In Context

## Sequence

- Select device in Aperi Topology Viewer
- Select action (Create Storage Extent)
- Launch from Aperi to VPMA
- Launch Browser or Application
- Send user info to bypass challenge
- Navigate to panel



# Resource Context

- Identification of the context described in Registration File
  - What type of Entity (Disk, Tape, Switch, etc.)
  - Properties of the Entity
    - Vendor starts with 'MyVendor'
    - Product contains 'MyProduct'
- When the user selects an Entity the registered launch points are checked to see which apply
  - Select an Entity
  - Apply registration descriptions to see if match launch context
  - Display the menu for the item
  - Launch the application
    - Install
    - Start
    - Pass Parameters

# Launch Types

- Launch a Web Based Application (Browser)
  - External Browser Window
  - Embedded Browser Component
- Launch an Installed Application
- Install and Launch an Application
- Install and Launch a Java Web Start Application

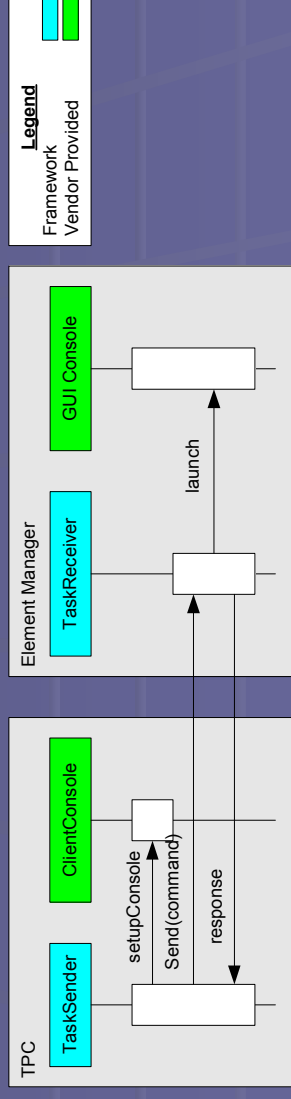
# Launch In Context

## Sending Parameters

- Registration File describes format of Launch command
- Launching a Web Application (URL)
  - Page for navigation and parameters for resource context
  - <http://<server:port>launch.jsp?page=createPool&subsystem=21125>
- Launching an application
  - myApplication “page=createPool” “subsystem=21125”

# Launching an Application

- Applications have unique issues:
  - Installation of application
  - Passing Info securely
- Launch In Context framework
  - TaskSender – framework that sends commands to clients
  - TaskReceiver – listens on socket for commands
  - ClientConsole – how to install, how to determine if running, how to call
  - GUI Console – the ‘real console’ code that does the actions



# Complete Framework

