

# Grouper Components Overview

|                           |                                               |                                |                                          |                                         |                                              |
|---------------------------|-----------------------------------------------|--------------------------------|------------------------------------------|-----------------------------------------|----------------------------------------------|
| <a href="#">Wiki Home</a> | <a href="#">Grouper Release Announcements</a> | <a href="#">Grouper Guides</a> | <a href="#">Grouper Deployment Guide</a> | <a href="#">Community Contributions</a> | <a href="#">Internal Developer Resources</a> |
|---------------------------|-----------------------------------------------|--------------------------------|------------------------------------------|-----------------------------------------|----------------------------------------------|

Here is an overview of components in the Grouper Toolkit.

| Component (with link to more info)                                                    | Description                                                                                                                                   |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Installer</a> (deprecated)                                                | Installs the Grouper API, quickstart data, UI, WS, client, and PSP.                                                                           |
| <a href="#">API</a>                                                                   | The core of the Grouper system.                                                                                                               |
| <a href="#">Subject API</a>                                                           | Handles the connection with a site's existing Identity Management operations                                                                  |
| <a href="#">Grouper Database</a>                                                      | Registry/repository of Grouper data                                                                                                           |
| <a href="#">Grouper Shell</a>                                                         | Command line for interacting with the Grouper API, including XML import / export                                                              |
| <a href="#">Web Services</a>                                                          | Allows application developers to leverage Grouper (SOAP and REST)                                                                             |
| <a href="#">Grouper Client</a>                                                        | A java client for Grouper web services                                                                                                        |
| <a href="#">Grouper Loader</a>                                                        | Synchronizes group memberships based on an external data source. This also runs various daemons and should be run in any Grouper installation |
| <a href="#">Grouper Daemon</a>                                                        | A command line process that can handle many Grouper tasks                                                                                     |
| <a href="#">Grouper User Interface</a>                                                | Allows browsing tree structure, managing groups, managing favorites and more.                                                                 |
| <a href="#">Attribute Framework</a>                                                   | Allows you to attach metadata to objects in the registry                                                                                      |
| <a href="#">Notifications/ChangeLog</a>                                               | Logs changes and allows for notification to external systems (using XMPP, HTTPS, and other connectors )                                       |
| <a href="#">Access Management Features</a>                                            | See the overview to learn about roles and permissions, rules, enable/disable dates and more                                                   |
| <a href="#">Rules</a>                                                                 | Configurable declarative scripts that run at certain times and perform specified actions                                                      |
| <a href="#">External Users</a>                                                        | Supports external or federated users                                                                                                          |
| <a href="#">Diagnostics</a>                                                           | Reports on the health of Grouper                                                                                                              |
| <a href="#">Provisioning Service Provider Next Generation (PSPNG)</a><br>(deprecated) | Provisions Grouper objects to LDAP/AD                                                                                                         |
| <a href="#">Visualization</a>                                                         | Graphs Grouper objects                                                                                                                        |
| <a href="#">Reporting</a>                                                             | Provides a report on a group or folder                                                                                                        |
| <a href="#">Attestation</a>                                                           | Marks a group or folder so that owners must review the membership list periodically                                                           |

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| Connectors (with link to more info)      | Description                                                       |
|------------------------------------------|-------------------------------------------------------------------|
| <a href="#">ESB Connector</a>            | Enable Grouper to interface with an ESB                           |
| <a href="#">Kuali Integration</a>        | Allows integration with Kuali Rice                                |
| <a href="#">SCIM Integration</a>         | Allows integration with SCIM (available in Grouper 2.2 and above) |
| <a href="#">Atlassian Connector</a>      | Implements the Atlassian access and profile providers             |
| <a href="#">Grouper VOOT Connector</a>   | implements the <a href="#">VOOT specification</a>                 |
| <a href="#">Another Grouper Instance</a> | Allows sharing a group between two Grouper management systems     |

### See Also

[Grouper Architecture Diagram](#)