



Grouper Training System Administrators Patching

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What is a patch?

- Zip file that contains
 - Metadata
 - New files to copy to Grouper
 - Old files that are being replaced
 - To verify that Grouper is in the expected state
 - To be able to roll back a patch
- Patches do not edit files, they add or replace existing files

Grouper patches can be applied to

- API
- User Interface (UI)
- Web Services (WS)
- Provisioning Service Provider (PSP)

When are patches created

- Small changes
- Do not want to wait for a minor release of Grouper
- Security related problems
- If problem can be fixed with a patch

Patch metadata

- Patches are numbered in order for the Grouper module
- Example grouper_v2_2_1_api_patch_0
- The patch zip file contains a metadata file:
 - grouper_v2_2_1_api_patch_0.properties

Patch metadata file contents

will show up on screen so user knows what it is

description = This patch fixes GRP-1095: hibernate exception handling masked

patches that this patch is dependant on (comma separated)

dependencies =

low, medium, or high risk to applying the patch

risk = low

is this is a security patch (true or false)

security = false

if this patch requires restart of processes (true or false)

requiresRestart = true

How patches are structured

- Zip file
- /new new files to be copied
- /old files to be replaced (if appl), contents must match exactly
- Inside /new and /old
 - /classes files on the classpath
 - /files files to be copied to app
 - /lib jars

Keeping track of which patches are applied

- Once patches are applied once, there is a file to keep track of patches
- grouperPatchStatus.properties

added by grouper-installer

```
grouper_v2_2_1_api_patch_0.date = 2015/01/18 17:45:34
```

added by grouper-installer

```
grouper_v2_2_1_api_patch_0.state = applied
```

How to run the patcher

- The patcher is run from a grouperInstaller:
 - install
 - upgrade
 - patch

How to run the patcher (continued)

- You run the patcher just like you run the installer
- Get the grouperInstaller.jar (note, VER in the command is e.g. 2.2.1) for your Grouper version

```
$ wget http://software.internet2.edu/grouper/release/VER/grouperInstaller.jar
```

- Run grouperInstaller.jar

```
$ java -jar grouperInstaller.jar
```

- Pick “patch” from the main menu

How to know when patches are available

- Read messages from grouper-users list
 - All patches are announced there
- Check release notes page for your version of grouper
 - All patches listed there
- Filter Jira for issues fixed in your version patch level
- Grouper patcher tells you

Patching demo

- This is an example of Grouper v2.2.1 (unpatched) applying patches

Quiz

- Click on the quiz link in the video description to reinforce your knowledge of this topic



Thanks!

Further information:

- Infosheets, mailing lists, wiki, downloads, etc.:
<https://spaces.internet2.edu/display/Grouper/Grouper+Wiki+Home>
- Grouper demo server:
grouperdemo.internet2.edu/
- Grouper Online Training Home:
spaces.internet2.edu/x/IIGfAQ