v2.5 Release Notes

- v2.6 release notes
- v4 release notes
- v5 release notes

- New Features in Grouper 2.5
- Support announcement
- v2.5 builds
- For more information about upcoming plans, see the Grouper Product Roadmap .
- Summary
- Upgrade from v2.4 to v2.5
    - See Also

New Features in Grouper 2.5

Grouper 2.5 includes many helpful new features, as listed below, as well as the enhancements provided in Grouper 2.4 patches, such as visualization and reporting.

The upgrade from 2.4.0 to 2.5 is not generally a major upgrade. The database did not change much.

You are required to use a container when running Grouper. This will ensure you have consistent directory structure, the correct version of libraries, and low risk and low effort upgrades. There are instructions to make using the container as easy as possible.

Expirable groups	Groups can have enabled / disabled dates and can be disabled (RBAC feature)
Container required	Grouper requires a container to run. No tarballs will be distributed. No more patches, no more confusing upgrades, no more inconsistent environments, no more lengthy installs
Container redesign	One servlet container, easier mounts, one directory structure, fewer processes, maven build, patchless
Grouper installer installs container	REMOVED
Improve pagination in WS	Cursor based paging allows fewer memory problems and paging which does not skip records
Gantt chart for jobs	See when jobs have executed, job overlap, how long jobs take, success or error
Add new web services	Get audit log Web Service Add point in time options for WS get members, get groups, group save, get memberships
Attributes on memberships in UI	Allow direct and indirect attributes on memberships in UI (see JIRA). See wiki documentation here
WS and UI authentication	Basic authn stored in database. Passwordless WS authn in future. This is more friendly for containers
Simple custom UI	Analyze access for a policy. Allow easy join/leave. One-pager application
Automatic DDL upgrades	Grouper can automatically adjust the database structure in a controlled way when a new container is run

Support announcement

11/1/2022: Grouper v2.5 will not be supported after 5/1/2023. Please upgrade to a newer supported version

v2.5 builds

Grouper container upgrade instructions

These will be marked as stable once they are out for a while without issue and/or as people start using these in production. This is a judgment call by the Grouper team. If you are using a new release please inform us so we can provide better advice.

Date	Container tag (version)	Status	Upgrade instructions and notes	Versions	Enhancements and bugs fixed in this version, known issues with this version
2023 /11/03	i2incommon /grouper:2.5.69 sha256: b3c46f8cde0ce2ab8e85abe0c3525149e57bc5e99fe4636a70e23f1c98ed79d0	EXPIRED	1 upgrade instruction	Shib: 3.4.1 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_392	2 Jiras Authentication bypass security issue Upgrade hibernate and ehcache in Grouper 2.5
2022 /12/22	i2incommon /grouper:2.5.68 sha256: 7714455fb50ffcf6e48e9cce38ab6995daf1444a94bf540feb8f778627cd7207	EXPIRED	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_352	3 Jiras (library updates for security CVE)
2022 /11/29	i2incommon /grouper: 2.5.66.1 sha256:3de82ff4db6d832f1e96adb84df3d6bf4bc9addc648a566ef407e55c9165e5a4	EXPIRED	None	Shib: 3.4.0 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_352	Upstream SP container pointed to new version
2022 /11/01	i2incommon /grouper:2.5.66 sha256: 60997344383b3df1881b4e5d119a06b6bd5d0844fc16aa4f4429573a1ff95eb2	EXPIRED	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_352	2 Jiras GRP-4430: upgrade commons text for security CVE
2022 /09/23	i2incommon /grouper:2.5.65 sha256:e533f25aae4a8d2110ddd7eb322984339123a3352011565ec4a3d48db848ca98	EXPIRED	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_342	7 Jiras Upgrade jars Make findBadMemberships full daemon scale for missing composites Run rule if condition with grouper session running with actAs subject Upgrade to latest csrfguard Make ddlutils not a dependency Change grouper client from xml to json (update unsecure libraries)
2022 /06/22	i2incommon /grouper:2.5.63 sha256: a9b40684e057373146a4a44c26f3b685ff768a11a2b37838dc9293befc0a53f5	EXPIRED	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_332	1 Jira GRP-4117 remove unneeded cross joins from membership queries
2022 /06/13	i2incommon /grouper:2.5.62 sha256: 9170a8b65f560d65e9e1966e4b57088f7be027daf16e914e0c1b696045637895	EXPIRED	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_332	2 Jiras PSPNG startup error WS getMemberships paging error

2022/02/16	i2incommon/grouper:2.5.60 sha256:793a491d4b5693fc2 2032b8f70fef0e43117787f1 bd8526ea9a671bc56e83e0b	RELEASED	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_322	2 Jiras Postgres driver security issue

2021/12/20	i2incommon/grouper:2.5.59.3
	sha256:45d8e8608ec07bbd3a 29137ba8e1758364ef20be810 a7a55d28acb7ed92c3604
		EXPIRED	None	Shib: 3.2.3
				Apache: 2.4.6
				Tomee: 7.0.9 (8.5.57)
				Openjdk: 1.8.0_312
					Log4j security problem fixed (again, again)!
					Note: the Grouper java version is 2.5.59, the version reported in the UI is 2.5.59.
					To verify you have the right version you can see the env var or log4j libs
					`[root@0c8d8738e95a bin]# echo $GROUPER_CONTAINER_VERSION`
					`2.5.59.3`
					`[root@0c8d8738e95a bin]# ls /opt/tomee/bin/log4j*`
					`/opt/tomee/bin/log4j-api-2.17.0.jar /opt/tomee/bin/log4j-core-2.17.0.jar /opt/tomee/bin/log4j-jul-2.17.0.jar`

2021/12/16	i2incommon/grouper:2.5.59.2
	sha256:6d9b0685f753041f77 b849f136b598af3d380f1b9a 13073dd1f11c74d3475421
		EXPIRED
		Log4j security problem (log4j v2.16.0)
			None	Shib: 3.2.3
				Apache: 2.4.6
				Tomee: 7.0.9 (8.5.57)
				Openjdk: 1.8.0_312
					Log4j security problem fixed (again)!
					Note: the Grouper java version is 2.5.59, the version reported in the UI is 2.5.59.
					To verify you have the right version you can see the env var or log4j libs
					`[root@0c8d8738e95a bin]# echo $GROUPER_CONTAINER_VERSION`
					`2.5.59.2`
					`[root@0c8d8738e95a bin]# ls /opt/tomee/bin/log4j*`
					`/opt/tomee/bin/log4j-api-2.16.0.jar /opt/tomee/bin/log4j-core-2.16.0.jar /opt/tomee/bin/log4j-jul-2.16.0.jar`

2021/12/10	i2incommon/grouper:2.5.59.1
	sha256:5c258cd3c398a47b1e 7c7cba7edc7f682f3d5aedd38 53aa284dfda9ccae99577
		EXPIRED
		Log4j security problem (log4j v2.15.0)
			None	Shib: 3.2.3
				Apache: 2.4.6
				Tomee: 7.0.9 (8.5.57)
				Openjdk: 1.8.0_312
					Log4j security problem fixed (NOT)!
					Note: the Grouper java version is 2.5.59, the version reported in the UI is 2.5.59.
					To verify you have the right version you can see the env var or log4j libs
					`[root@0c8d8738e95a bin]# echo $GROUPER_CONTAINER_VERSION`
					`2.5.59.1`
					`[root@0c8d8738e95a bin]# ls /opt/tomee/bin/log4j*`
					`/opt/tomee/bin/log4j-api-2.15.0.jar /opt/tomee/bin/log4j-core-2.15.0.jar /opt/tomee/bin/log4j-jul-2.15.0.jar`

2021/12/08	i2incommon/grouper:2.5.59 sha256:347fb78230de81408 1a4ed19929b8dda70d00779 02283184fcd6aecc608f423f	EXPIRED Log4j security problem	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_312	None
2021/10/20	i2incommon/grouper:2.5.58 sha256:5b012b02d72238bb f7c49ee786510539f62d02b1 a84d674bc411f67d1ee17d50	EXPIRED Log4j security problem	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_312	4 Jiras Copy group validation error with invalid (dot) character fix Object type UI fix RabbitMQ configuration fix

2021 /09/17	i2incommon /grouper:2.5.57 sha256: 9fd575e5f2b8feacf1 b86cdd44779f89b23a7b375 da7fdb1c77c50 dd105af24b	EXPIRED Log4j security problem	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_302	5 Jiras Provisioning framework fixes Chrome 93 header fix
2021 /09/06	i2incommon /grouper:2.5.56 sha256: 13f32e94d90f83dd6 333fee3abad682b6ecb9179 f688fd614f8c23 b57ed31680	EXPIRED NO ENHANCEMENTS AFTER 2.5.56 Log4j security problem	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_302	6 Jiras Incremental LDAP attribute provisioning improvements Auto create LDAP provisioning filters
2021 /09/01	i2incommon /grouper:2.5.55 sha256: 13124e45f77733887 20ae1190f86a5 e47cb5de4b a75c8f032b16cf 92c2cedc35	RELEASED Log4j security problem	3 upgrade instructions	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_302	22 Jiras Visualization for composites is accessible Remove container taglib startup errors OpenLDAP empty member attribute support in provisioning framework Database migration utility fix LDAP to SQL utility
2021 /07/27	i2incommon /grouper:2.5.54 sha256: 6fda7bfb9c3998cdc 02b00a3bab63a bd4cca3671 6fe701b2b9f13f e1d0554320	EXPIRED Log4j security problem	None	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_302	9 Jiras Azure provisioner in new provisioner framework Loader screen fix LDAP new provisioner fix Resolved version conflicts in okio library between Azure and Duo dependencies
2021 /07/15	i2incommon /grouper:2.5.53 sha256: a144bbedc1d484b3e b968a973bb1073 b0340d0c4 323caa08f7aad 8e9460a040b	EXPIRED Misc loader screen: GRP-3530 New prov framework ldap issues: GRP-3533, GRP-3534 Log4j security problem	1 upgrade instruction	Shib: 3.2.3 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_292	25 Jiras SCIM provisioner for AWS Reports can generated from GSH Attestation notifications can be sent to a group Loader can manage group display names Can delegate loader management
2021 /05/27	i2incommon /grouper:2.5.52 sha256: a8ecd8a4d953321b 37eacdbe50475 295e885a83 ef33598cb1de6 6a4f277ba160	EXPIRED Log4j security problem	5 upgrade instructions	Shib: 3.2.2 Apache: 2.4.6 Tomee: 7.0.9 (8.5.57) Openjdk: 1.8.0_292	27 Jiras Incremental provisioning performance improvements Custom UI configuration moved from group attributes to UI wizard and config GSH template improvements
2021 /05/01	i2incommon /grouper:2.5.50 sha256: f108efdceaaf875b7c 8879a091557c6 a64969545e 633e4e6efe580 3b5520a057	EXPIRED Log4j security problem	None	Shib: 3.2.2 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_292	6 Jiras Loader doesn't create ancestor folders Incremental LDAP doesn't provision recalc memberships
2021 /04/28	i2incommon /grouper:2.5.49 sha256: a1d389eb6735d02d4 2c510805c735c 05a5824d656 bb6a49034bb19 a4eb4cc8ef	RELEASED Loader issue: GRP-3444 Provisioning: GRP-3445 Log4j security problem	4 upgrade instructions	Shib: 3.2.2 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_292	71 Jiras GSH template updates / fixes Incremental provisioning performance improvements Attribute propagation re-write (e.g. "types" daemon) New default validation on Grouper object system names (see upgrade instructions)

2021 /03/29	i2incommon /grouper:2.5.47 sha256: e1523aed42d6af97f 14267fa31ad0ac765c32831 6c9d3d52e1ab9 483508c17de	RELEASED GSH bugs: GRP-3349, GRP-3348, GRP-3350 For GSH templates use 2.5.50+ Log4j security problem	1 upgrade instruction	Shib: 3.2.1 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	46 Jiras Bushy LDAP provisioning GSH api additions / improvements Email enhancements
2021 /03/18	i2incommon /grouper:2.5.46 sha256: e19f928406355cb54 08ba7f271f6915 b3db5ef856 2a25ef15458b9 4d8dc9469a	RELEASED For GSH templates use 2.5.50+ Log4j security problem	None	Shib: 3.2.1 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	14 Jiras Small fix with provisioning and GSH templates
2021 /03/17	i2incommon /grouper:2.5.45 sha256: f94bfdf83fc5bd55d3 11164dd77dcf3 6f4efde8629 b85ea264a55c6 3528328db	RELEASED For GSH templates use 2.5.50+ Log4j security problem	2 upgrade instructions	Shib: 3.2.1 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	33 Jiras GSH templates can be run from UI Provisionable groups and folders improved Provisioning diagnostics starting point Grouper client can be used in multi-app JVM Upgrade mysql/postgres drivers and improve quartz pooling
2021 /03/03	i2incommon /grouper:2.5.44 sha256: 1953b5475f237aba6 44a5312464368 6d407c7f8e5 8ee12ceaec8db 9d815435d1	RELEASED Log4j security problem	None	Shib: 3.2.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	29 Jiras GSH templates and WS enhancements Sync to Grouper from another Grouper or SQL enhancements JDBC/Hibernate fetch size bumped up to 1000 (oracle performance improvement)
2021 /02/24	i2incommon /grouper:2.5.43 grouper@sha256:20ab5adf6c2 8834c8945cf6df 449a67f4df19a 162a9bfccd865 918206c34a3b0	EXPIRED Log4j security problem	2 upgrade instructions	Shib: 3.2.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	12 Jiras GSH templates and WS Sync various objects to Grouper via SQL or another Grouper instance GSH scripts in daemon can have blocks on multiple lines Grouper external subject source issue resolved
2021 /02/12	i2incommon /grouper:2.5.42 grouper@sha256:00cd2a6d4bac27025f679ebdcf8a8a372403c2 0da6fa3147dcee320018a8cd2d	EXPIRED (if you do not use Grouper external subject source) Log4j security problem	None	Shib: 3.2.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	13 Jiras Provisioning improvements LDAP loader improvements MembershipFinder enhancements
2021 /02/01	i2incommon /grouper:2.5.41 sha256: bb21a34ad75a9fa3a7 5596645ffc75c4 a53d3c3bbe 5b13de8180ac4 311919990	EXPIRED (if you do not use Grouper external subject source) Log4j security problem	1 upgrade instruction	Shib: 3.2.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	Known issue: GRP-3118 (grouperExternal subject source broken) 14 Jiras Azure legacy provisioner is tested and works Fix provisioning membership issues LDAP provisioning metadata via configuration (and not testing metadata) Container updates for SSL
2021 /01/27	i2incommon /grouper:2.5.40 sha256: 74f445fb55dea3821 58b79ff88d5d1d 27bdbb604 a7fbb4d18bf394 02e6c70ce7	EXPIRED (Azure CLC provisioning might not work) Log4j security problem	2 upgrade instructions	Shib: 3.2.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_282	33 Jiras Subject source wizard (experimental) Openshift support Email notifications daemon Add "manual" and "intermediate" group types SCIM and Azure provisioners (new framework) (experimental) Provisioner targets in visualization

2020/12/09	i2incommon/grouper:2.5.39 sha256: df647042eb12ff088a7cfaff186a387286b23ac782183923c587daa5f24a47ea	EXPIRED Log4j security problem	1 upgrade instruction	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_275	18 Jiras Grouper provisioning LDAP/DB pools dynamically adjust without restart on config change Custom UI updates Import members audit improvement
2020/11/09	i2incommon/grouper:2.5.37.1 sha256: b1708b7e022472b2e9055676aefe50a7dd773b053b2d817ee96369712b56a04a	EXPIRED Log4j security problem	None	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.9 Openjdk: 1.8.0_275	GRP-3015 and os updates
2020/10/30	i2incommon/grouper:2.5.37 sha256: d384f0c4f67e18be3b138649050d6d687b16be5a476fcc3c65a0280748365a58	SECURITY ISSUE GRP-3015 Log4j security problem	None	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.8 Openjdk: 1.8.0_272	13 Jiras in total (-2 bugs, +18 improvements) Group import screen progress indicator PSPNG Active Directory large group fix Security improvement prevents stealing tomee session cookie
2020/11/09	i2incommon/grouper:2.5.36.1 sha256: 9ba5d138515246b64a711fafe451fb7a1730f9aee13a7d2af4e1355defacedd8	EXPIRED Log4j security problem	None	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.8 Openjdk: 1.8.0_275	GRP-3015 and os updates
2020/10/20	i2incommon/grouper:2.5.36 sha256: 27f50a205208a48c3e78ef24b62a6480a7460e427031b2c4d71bc34e09000ddc	SECURITY ISSUE GRP-3015 Log4j security problem	3 upgrade instructions	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.8 Openjdk: 1.8.0_265	26 Jiras in total (-8 bugs, +18 improvements) Lots of PSPNG improvements
2020/09/16	i2incommon/grouper:2.5.35 sha256: 158ff566eb4e5b9208ac881d6dba126e968d34eef78192086359cefa8e163e1f	EXPIRED Log4j security problem	2 upgrade instructions	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.8 Openjdk: 1.8.0_265	22 Jiras in total (-5 bugs, +15 Improvements, +2 New Features)
2020/07/21	i2incommon/grouper:2.5.33 sha256: d3c880f3ebd6704257cab4c423897dfb4feb50442ef5533e9cafb7b0a43ada50	EXPIRED Log4j security problem	7 upgrade instructions	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.8 Openjdk: 1.8.0_262	Tomee security advisory and update to web profile 7.0.8 48 Jiras in total (21 bugs, 25 Improvements, 2 New Features) Known issue: Container will not stop/start, you need to rm and run it
2020/05/18	i2incommon/grouper:2.5.29 sha256: 6e57a508dfb83c3829e0be8e278e663ab59ea305ea67dab4c842152250da4b395	EXPIRED Log4j security problem	None	Shib: 3.1.0 Apache: 2.4.6 Tomee: 7.0.7 Openjdk: 1.8.0_252	API fixes: GRP-2806, GRP-2805, GRP-2804, GRP-2797, GRP-2795 Container updates: GRP-2708, GRP-2800, GRP-2802, GRP-2803 Google provisioner: GRP-2788, GRP-2789 12 Jiras in total

2020 /05/13	i2incommon /grouper:2.5.28 sha256: 5377471e210206be3 613e11f095da80d702133998 e4c4a54304d55 2263434ef2	EXPIRED Log4j security problem	2 upgrade instructions		Various google provisioner fixes: GRP-2787, GRP-2786, GRP-2785, GRP-2784, GRP-2783 GRP-2705: configs in UI show unmasked password for properties not in base config 34 Jiras in total
2020 /05/05	i2incommon /grouper:2.5.27 sha256: 3bad2b55e0e83092 f74de33e2cccc 3129080241 44ecd6f515e7dd c5d1bd46b7b	EXPIRED Log4j security problem	6 upgrade instructions		GRP-2723: Grace periods GRP-2744: Grouper quickstart GRP-2709: Database migration utility GRP-2712: Fix attribute def name editing GRP-2711: Search with magnifying glass doesn't work 34 Jiras in total **Known issues** GRP-2757: Mysql unix needs recent memberships loader job tweak GRP-2762: grouper-ui.properties config editor in UI problem GRP-2767: env vars in container that end in _FILE need tweak
2020 /05/04	i2incommon /grouper:2.5.26 sha256: 65c937260c3914bdb 75d277d8aa082 57fa7016b9a 5675188bd3362 c4079b14c8	NOT STABLE Log4j security problem	None		**Known issues** GRP-2748: Multiple contexts causes issues GRP-2750:the first upgrade to 2.5.26 doesnt exit if running gsh -registry (kicks off daemon)
2020 /04/21	i 2incommon /grouper:2.5.23 sha256: 2d5b05d6cbd006e1 5c28f423757122a8837b20c 38044dfcda524f 12fae7d95b4	EXPIRED Log4j security problem	5 upgrade instructions		Various Azure provisioner updates: GRP-2691, GRP-2670, GRP-2668, GRP-2669, GRP-2671 GRP-2680: "other job" that can run sql or gsh scripts GRP-2683: Package base properties into their respective jars GRP-2685: update gantt chart 31 Jiras in total **Known issues** GRP-2712: Attribute def name editing is wrong GRP-2711: Search with magnifying glass doesn't work
2020 /04/08	i2incommon /grouper:2.5.22 sha256: b675bb410bf873483 497b9b231e7a5 db208645e5 8a3a42a8048381a33b79fd19	EXPIRED 2.5 initial release Log4j security problem	2.5 DDL changes		**Bugs fixed in this version** GRP-2657: grouperClient requires commons-lang GRP-2654: pspng error on wrong slf4j libraries GRP-2658: take /opt/grouper/conf and /opt/grouper/lib out of installer GRP-2661: gsh init fails on gsh.sh -registry -check -runscript -noprompt **Enhancements fixed in this version** GRP-2646: make a new gsh entrypoint if not auto upgrading DDL to run install or upgrade **Known issues** GRP-2712, GRP-2711
2020 /04/07	i2incommon /grouper:2.5.20 sha256: 6b9e4b9272d06bee aedba25bc4459729c98432e a5f37b111a57d 7fa97c8e78a3	NOT STABLE Log4j security problem			**Bugs fixed in this version:** GRP-2648, GRP-2642, GRP-2651, GRP-2556 **Known issues with this version:** GRP-2657, GRP-2654, GRP-2658
2020 /04/05	i2incommon /grouper:2.5.19	NOT STABLE Log4j security problem			**Bugs fixed in this version:** GRP-2635, GRP-2636, GRP-2638, GRP-2637, GRP-2641
2020 /04/01	i2incommon /grouper:2.5.15	NOT STABLE Log4j security problem			**Enhancements:** GRP-2630, GRP-2634 **Bugs fixed in this version:** GRP-2629 **Known issues with this version:** GRP-2635, GRP-2636
2020 /03/31	i2incommon /grouper:2.5.14	NOT STABLE Log4j security problem			**Known issues with this version:** GRP-2629

For more information about upcoming plans, see the Grouper Product Roadmap .

Many other fixes and improvements were also made to all components of the Grouper Toolkit: Grouper API, Administrative & Lite UIs, Grouper Web Services, Grouper Client, Grouper Shell, Grouper Loader, PSP, and the Subject API.

Summary

When selecting which Grouper v2.5 container to use (which build number), review the release notes wiki. You should install the latest stable v2.5.* release (v2.5.43 as of 2021/02/24). When you do a minor build update in the future, look at this wiki to verify the stability of the version

v2.5 is a minor upgrade from the latest v2.4 container. Some defaults have changed in the properties files, and the container layout has drastically changed but it should be easy to adjust your docker file.

If you use v2.4 not in a container, then you will have to start using the container. You don't need orchestration or a container practice in your organization, you can still use the same server you use now, just install docker and use the maturity level 0 advice to run Grouper. This should not be a barrier to running Grouper. If you are forbidden from running a container, at your institution and still want v2.5, it is possible to install docker, get the container, copy files out, and remove docker (sounds painful right? hope you don't have to do that 🙂).

If you are in v2.2.1+, then it is similar to v2.4 not in a container. The DDL upgrade to 2.5 can run automatically from v2.2.1, but you should follow the "v2.4 Upgrade Instructions from v2.3" for everything except DDL. (and "v2.3 Upgrade from v2.2" if applicable) (Note: you need Grouper v2.5.36+ if you are in 2.2.1)

If you are in 2.2.0 or before, you need to upgrade to v2.2.1 before upgrading to v2.5 (or notify the Grouper team for advice)

There are a lot of specifics here based on where you are in Grouper, this document will attempt to unravel that.

Upgrade from v2.4 to v2.5

- If you don't have a morphString.properties, add one to the classpath (e.g. /opt/grouper/conf) and put a random alphanumeric upper/lower 16 char secret in there for all JVMs (UI/WS/daemon/GSH)
- If you are not using configuration in the database, you should migrate to that
  - You have various envs, dev, test, prod. In one env, you have various JVMs: UI, WS, daemon, GSH. Multiply that out and you have a lot of config files.
  - With configuration in the database you don't need those config files and the configuration is in the database and editable from the UI (no need to deploy your container). So all the JVMs (UI, WS, daemon, GSH) in one env (dev, test, prod) will automatically be consistent.
  - The config files not in the database are: grouper.hibernate.properties, morphString.properties, grouper.text.en.us.properties
  - Take an env (e.g. dev) and look at all the config files of each type (e.g. grouper-loader.properties), consolidate those, and import into the UI, and dont provide that config file anymore
  - This will make config file changes easier (and mostly runtime), you will not have issues when different JVMs are inconsistent (dont need to copy config file to multiple containers)
- Database upgrade. There are a few low risk database changes (a few new tables, views, indexes). Grouper v2.4 will run against a v2.5 registry fyi. Grouper v2.3 should also. (disabled groups in v2.5 could be enabled in v2.4-)
  - If Grouper is running the DDL automatically, or you run it from gsh manaually, or you run the script in your DB UI tool or whatever, if it fails part-way through, you need to grab the rest of the DDL scripts (from WEB-INF/ddlScripts) and run the rest manually. Grouper will not be able to start where it left off and you need to fix it.
  - Views grouper_groups_v or grouper_roles_v will be changed. Oracle and mysql will replace those views, postgres will drop and create. If you use Postgres, see if there are any grants to those views and recreate them after DDL upgrade. For all three see if views or objects select from those views and make sure everything is intact afterwards (keep source of objects that use grouper objects and keep grants of grouper objects)
  - Grouper DDL auto-upgrade. It is recommended to set this in grouper.hibernate.properties to auto-upgrade the database. will work from v2.3+ to v2.5 and will auto upgrade from here on in. Note, your database username that grouper uses needs to be permitted to make DDL changes in its database. You might need to get the DBAs to adjust that user. If you set this in grouper.hibernate.properties, turn on the container, and it will upgrade the database automatically. Any future v2.5 DDL will be backwards compatible with all v2.5.* containers
  - If you want the legacy DDL of manual updates, then turn on the container, and run "gsh -registry -check" and review and run that script. Some examples for various databases are here. Compare the generated script with one of these scripts and run against your database. Note: each time you update your container you should check the release notes page about DDL requirements. We will be changing DDL with various 2.5 builds periodically. Auto-DDL is strongly recommended.
- grouper.base.properties: security.show.folders.where.user.can.see.subobjects = false by default. This is the recommended setting. It means everyone can see all folders whether they have objects inside or not. If you want the old default behavior, set that in grouper.properties
- grouper.base.properties. Do you have the rule that vetoes assignments in folder if subject not in group? The default in v2.5 (different than v2.4) is to enforce that by change log and daemon. This is recommended and you probably want this. But it could remove assignments when you turn Grouper on. Which is probably what you want
- Tomcat basic auth and apache basic auth can be replaced. Do you use tomcat-users.xml or apache user file? You should switch to Grouper basic auth (note you dont have to switch).
- Custom Java
  - You should check to see if your Java still compiles until 2.5. It should, but check anyways. Tweak it if you need to or ask for advice on slack. You might want to rebuild anyways.
  - Note that the daemon runs in tomee now, so calls like ClassLoader.getSystemResource... will not work
- Container changes
  - For your overlays of existing files, look at the new container files, and make sure that the changes you made do not overwrite other things in the file. e.g. server.xml, grouper-www.conf, web.xml, etc

- There is no more /opt/tomcat. It is /opt/tomee now. It uses Tomcat 8.5 so things should generally be the same, but if you were overlaying files into /opt/tomcat, then you should redo those changes for tomee (diff your overlay with tomee, and make sure you are only changing your changes, not introducing other changes from the old container)
- If you are doing WS/UI authentication in tomcat (e.g. ldap), you need to merge with the new server.xml and make sure the connector tomcatAuthentication is true (defaults to false now). Also make sure the web.xml is right
- There is only one webapp now, not one webapp for UI/WS/SCIM
- There is no longer a command line daemon
- If you ran v2.4 in a container, then you will need to adjust your mounts and Dockerfile
- The path to Grouper is: /opt/grouper/grouperWebapp
- If used this previous path: /opt/grouper/conf, change to /opt/grouper/grouperWebapp/WEB-INF/classes
- If used this previous path: /opt/grouper/lib, it will not work. If the jar is for the UI/daemon/GSH. e.g. a new change log consumer, use /opt/grouper/grouperWebapp/WEB-INF/libUiAndDaemon. If it is a driver that should be in those things and WS and SCIM, then put it in /opt/grouper/grouperWebapp/WEB-INF/lib instead
- Note: there is no Oracle driver anymore in the container (unless you used installer and agreed to Oracle terms). You need to download the oracle driver and put in /opt/grouper/grouperWebapp/WEB-INF/lib. Might want to use this: https://repo1.maven.org/maven2/com/oracle/ojdbc/ojdbc8/19.3.0.0/ojdbc8-19.3.0.0.jar
- If you used /opt/grouper/grouper.ui, grouper.ws, grouper.apiBinary, grouper.scim, you need to adjust those. There is one webapp dir in /opt/grouper/grouperWebapp
- It is recommended to just put files here: /opt/grouper/slashRoot especially for mounting (will copy the structure to the root dir / in the container)
    - If you do not have a Dockerfile, you only need one mount path to the container
    - Example for classpath file: /opt/grouper/conf/grouper.hibernate.properties or /opt/grouper/slashRoot/opt/grouper/conf/grouper.hibernate.properties
- All things run in tomee (not daemon command line anymore). So this is how to set memory for all envs. Note, it used to be different for daemon envs, so adjust those accordingly. Daemon should have 12gigs at least

```
ENV GROUPER_MAX_MEMORY="3g"

Test the memory setting in all your containers:
# ps -ef | grep tom   (get pid)
# sudo -u tomcat jmap -heap <pid>     (see max heap, should be approx what you expect)
```

- If you copy files into the container, you should end your (Dockerfile or whatever) script by setting the owner of the webapp dir

```
RUN chown -R tomcat:tomcat /opt/grouper/grouperWebapp
```

- vt-ldap is no longer supported. Make sure you are not using it in grouper-loader.properties

This gets you to v2.5.X. Now look at the v2.5.X upgrade steps and see which ones apply to you

See Also

Release Notes for Grouper 2.5

See Also

Grouper Downloads

Blog on Grouper 2.5 (April 2020)

Blog on Grouper Deprovisioning with Grouper 2.4 (September 2018)