
What's New in EF Portal 2026.0



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EF Portal Web Configuration Editor

The Web Configuration Editor service that enables administrators to modify configuration parameters and files directly from the portal, without accessing the underlying file system. The service also provides built-in validation of the configured settings.

With the new configuration editor, you can easily enable additional schedulers or session managers, adjust their specific parameters, and perform live validation to ensure the configuration works as expected.

The screenshot displays the EF Portal Web Configuration Editor interface. On the left is a navigation sidebar with categories: EF Portal Configuration, HPC, Virtual Desktops, File Management, Authentication, Cluster Access, and Advanced. The main content area is titled 'HPC' and includes 'Reset' and 'Save' buttons. It is divided into three sections: 'Workload Manager', 'Scheduler Settings', and a validation notification. The 'Workload Manager' section lists supported HPC workload managers (slurm, lsf, pbs, sge, torque, dcvs) and shows 'SLURM' and 'DCVSM' as enabled options. The 'Scheduler Settings' section shows 'SLURM' as the default workload manager and includes a 'Validate Configuration' button. A green notification box displays the output of a configuration check, showing successful execution of various Slurm commands and confirming that SLURM_BINDIR is correct.

Search...

HPC Reset Save

Manage and configure HPC settings.

Workload Manager

Workload Managers EF_GRID_MANAGERS [grid.conf]
List of HPC workload managers available in the portal.
Supported values:
- slurm : SLURM (HPC and VDI Linux)
- lsf : IBM LSF (HPC and VDI Linux)
- pbs : Altair PBS Professional (HPC and VDI Linux)
- sge : Grid Engine (HPC and VDI Linux)
- torque : TORQUE (HPC and VDI Linux)
- dcvs : DCV Session Manager (VDI Windows and Linux)
Example: EF_GRID_MANAGERS="slurm,dcvsm"

SLURM x DCVSM x

Select the enabled Workload Managers ▾

Default Workload Manager EF_DEFAULT_GRID_MANAGER [grid.conf]
Default scheduler used when no specific grid manager is provided at job submission time.
This value must match one of the workload managers listed above.
If this parameter is unset or empty, the first entry in the EF_GRID_MANAGERS list is used automatically.
Example: EF_DEFAULT_GRID_MANAGER="slurm"

SLURM ▾

Scheduler Settings

SLURM DCV Session Manager

Cluster Label SLURM_CLUSTER_LABEL [ef.slurm.conf]
UI label to use for the SLURM cluster name. Default: the cluster name returned by SLURM.

Checking Slurm Configuration...

[INFO] SLURM_BINDIR not defined, falling back to PATH

[INFO] Slurm version: slurm 25.05.3

[SUCCESS] /usr/bin/squeue executed successfully

[SUCCESS] /usr/bin/sbatch executed successfully

[SUCCESS] /usr/bin/sinfo executed successfully

[SUCCESS] /usr/bin/scontrol executed successfully

[SUCCESS] /usr/bin/scancel executed successfully

[SUCCESS] /usr/bin/srun executed successfully

[SUCCESS] /usr/bin/sacct executed successfully

Validation successful for all Slurm commands, SLURM_BINDIR is correct.

Validate Configuration

Binary Directory SLURM_BINDIR [ef.slurm.conf]
Absolute path to the file which sets the environment to run SLURM.

EF Portal Configuration

HPC

- Workload Manager
- Scheduler Settings
- Host Commands
- Job Cache
- Job Notifications
- Presentation

Virtual Desktops

- Interactive Sessions
- Remote Display Technology
- Logging
- Networking
- Custom Hooks
- Screenshots
- Job Submission Details
- Presentation

File Management

- Places
- File Manager
- Presentation

Authentication

- Default Authorities
- Authorities Settings
- REST API
- Portal Access

Cluster Access

- Features
- Configuration

Advanced

- Server
- Database
- Agent
- Security
- Downloads
- Triggers
- General

Virtual Desktops

Manage and configure Virtual Desktops settings.

Interactive Sessions

Default OS INTERACTIVE_DEFAULT_OS [interactive.econf]

Default operating system for new interactive sessions (e.g. linux, windows).

LINUX

Default Job Manager for Interactive Sessions INTERACTIVE_DEFAULT_JOBMANAGER [interactive.econf]

Default job manager if OS-specific defaults are not set.
The more specific setting will be used.

SLURM

Default Max Sessions Limit INTERACTIVE_DEFAULT_MAX_SESSIONS [interactive.econf]

Default session limit for sessions of the same interactive class.
If negative or undefined, no limit is set.

► Advanced Settings

Remote Display Technology

DCV Session Manager Cluster Ids DCVSM_CLUSTER_IDS [dcvsm.econf]

List of DCV Session Manager cluster identifiers managed by EF Portal.

Example: DCVSM_CLUSTER_IDS=dcvsm_cluster1,dcvsm_cluster2

dcvsm_cluster1

File: clusters.props

```
1 #
2 # This file has been created during EF Portal installation.
3 # It contains only the installation specific settings.
4 #
5 # This file contains sensitive data and should be readable by the user running
6 # EF Portal but not accessible by others (read/write/execute).
7 # EF Portal will refuse to load this file if it is accessible by others.
8
9 # DCV Session Manager Cluster Configuration
10 #
11 # Each cluster is identified by a unique cluster ID, for example:
12 # dcvsm_cluster1, dcvsm_cluster2, mycluster, etc.
13 #
14 # For each cluster ID (e.g., dcvsm_cluster1), the following variables must be
15 # defined:
16 # - DCVSM_CLUSTER_dcvsm_cluster1_AUTH_ID
17 # - DCVSM_CLUSTER_dcvsm_cluster1_AUTH_PASSWORD
```

It's possible to easily enable, disable, and configure the Web Terminal and Proxy features.

Cluster Access Manage and configure Cluster Access settings. Reset Save

Features

Additional Roles And Features EF_ADDITIONAL_ROLES [enginframe.conf]
Comma separated list of additional roles for EF Portal.
Each role corresponds to a feature or component that can be activated.
- shell : required to enable the Web Terminal feature
- proxy : required to enable the Proxy feature
Example: shell,proxy
Default: shell

SHELL x PROXY x

Select the enabled Additional Roles And Features v

Configuration

EF Portal Web Terminal EF Portal Proxy

Changes to the following settings require a restart of the EF Portal Web Terminal: $\$(EF_ROOT)/bin/enginframe restart shell$

Web Terminal Server Port SHELL_PORT [env] ⓘ
Port number on which the EF Portal Remote Shell Server listens for incoming connections.
Default: 3000
3000

Web Terminal Inactive Timeout SHELL_INACTIVE_TIMEOUT_MS [env] ⓘ
Duration of inactivity (in milliseconds) after which the remote shell connection will be closed.
Default: 300'000 milliseconds (5 minutes).

Web Terminal Max Duration SHELL_MAX_DURATION_MS [env] ⓘ
Maximum allowed duration (in milliseconds) for a remote shell connection.
Default: 3'600'000 milliseconds (60 minutes).

Live validation of misconfigured parameters: the configuration editor immediately highlights invalid values so you can spot and correct issues before saving.

With the new search feature, you can quickly look through all configuration parameters to find what you need, whether it's the parameter that controls the auto-refresh period of the tables or any other feature you're looking for.

HPC Manage and configure HPC settings. Reset Save

Presentation

Spooler Details

Spooler Data Autorefresh Interval HY_SPOOLER_INFO_AUTOREFRESH [ui.hydrogen.conf]
Auto-**refresh** interval for the data and jobs list in the Spooler Details view (in seconds; 0 disables).
30

Spoolers List

Spoolers List Autorefresh Interval HY_LIST_SPOOLERS_AUTOREFRESH [ui.hydrogen.conf]
Auto-**refresh** interval for the Spoolers list view (in seconds; 0 disables).
30

User's Jobs List

Jobs List Autorefresh Interval HY_LIST_JOBS_AUTOREFRESH [ui.hydrogen.conf]
Auto-**refresh** interval for the Jobs list view (in seconds; 0 disables).
30

Parameters requiring a server restart or a daemon restart are highlighted, and they remain marked until the restart is performed.

The screenshot shows the 'Advanced' configuration page for the EF Portal. On the left is a navigation menu with sections for 'EF Portal Configuration', 'HPC' (Workload Manager, Scheduler Settings, Host Commands, Job Cache, Job Notifications, Presentation), and 'Virtual Desktops' (Interactive Sessions, Remote Display Technology, Logging, Networking, Custom Hooks, Screenshots). The main content area is titled 'Advanced' and contains a search bar, a 'Reset' button, and a 'Save' button. A prominent orange notification banner states: 'Configuration saved, but to apply some of the changes a restart of the following daemons is required: server'. Below this, the 'Server' section is expanded, showing two configuration items: 'Server Min Heap' (SERVER_MIN_HEAP) and 'Server Max Heap' (SERVER_MAX_HEAP). Both items are highlighted in orange, indicating they require a restart. The 'Server Min Heap' value is set to '2049m' and the 'Server Max Heap' value is set to '2048m'. Each item includes a description of its function and a warning icon.

Real-Time Notification System

The new in-portal notification system delivers instant messages with clear severity levels, read/unread states, role-aware visibility (RBAC), multi-tenant scoping, and a consistent, accessible UI.

Beyond system status updates, it also surfaces configurable job status notifications so teams can follow lifecycle changes in real time. Admins can publish notifications using our out-of-the-box Bash and JavaScript tooling for easy automation and integration.

The screenshot shows a 'Notifications' panel with a dark header bar containing a notification bell icon with a '2' badge. The panel has a title 'Notifications' and a dropdown menu set to 'All severities'. It displays three notification items, each with an 'INFO' severity level: 'Job 358 completed' (43m ago), 'Job 357 completed' (1h ago), and 'Scheduled maintenance tonight' (20h ago). Each item includes a brief description of the event. At the bottom of the panel are two buttons: 'Mark all as read' and 'Delete all'.

Administrators can also send custom notifications to all users in a role or to specific users through a dedicated UI.

Send Notification

Severity ?	Category ?	Role ?	Target User ?
<input checked="" type="button" value="Info"/> <input type="button" value="Warning"/> <input type="button" value="Error"/> <input type="button" value="Critical"/>	System	All users	username (optional)

Title

Body

NOTICE: all systems will be unavailable tonight from 11:00pm to 00:00am.

Press Ctrl/Cmd+Enter to send 72/500

The notification system behavior can be configured in the new EF Portal Configuration Editor.

Job Notifications

Job Status Changes to Notify GRID_NOTIFY_JOB_STATUSES [grid.notifications.efconf]

Comma-separated list of job statuses that should trigger a user notification.
Job notifications are available only if the Job Cache is enabled.
Accepted values (case-insensitive): Running, Done, Exit

- Running: send a notification when a job starts
- Done: send a notification when a job completes successfully
- Exit: sends a notification when a job ends with a non-success status

Default: empty (no notifications are sent if the parameter is not set)

Select the enabled Job Status Changes to Notify

Thresholds for system notifications:

Notifications

CPU Load Notification Threshold ADMIN_NOTIFICATIONS_CPU_THRESHOLD [admin.notifications.efconf]

CPU load threshold (%) for EF Portal hosts.
Defines the percentage value (0–100) at which CPU usage alerts are triggered.
A notification is sent when the host's CPU load exceeds this threshold.
A value of 0 disables CPU-related notifications.
Syntax: ADMIN_NOTIFICATIONS_CPU_THRESHOLD=[percentage] (Integer >= 0)
Default: 95

Host Storage Notification Threshold ADMIN_NOTIFICATIONS_STORAGE_THRESHOLD [admin.notifications.efconf]

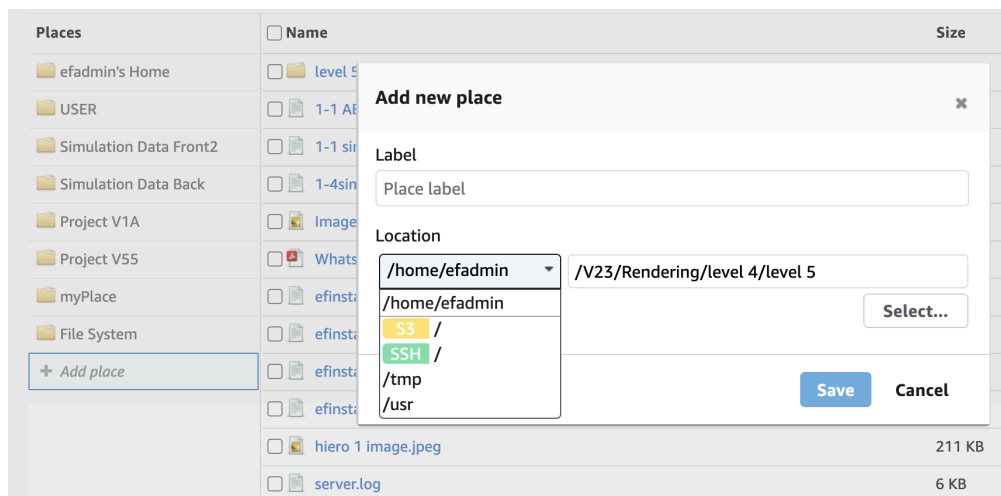
Host storage threshold (%) on the filesystems used by EF Portal.
Defines the percentage value (0–100) at which storage usage alerts are triggered.
A notification is sent when any monitored filesystem usage exceeds this threshold.

File Manager Places Editor

File Manager user interface now enables users to add, modify, remove, and sort their places. This allows them to easily organize their data into folders, projects, local and remote data stores.

The Places Editor supports file, ssh and s3 locations. Places can also conveniently be added via the Remote File Browser accessible via the “Select” button.

Here is a screenshot of the Places Editor interface:

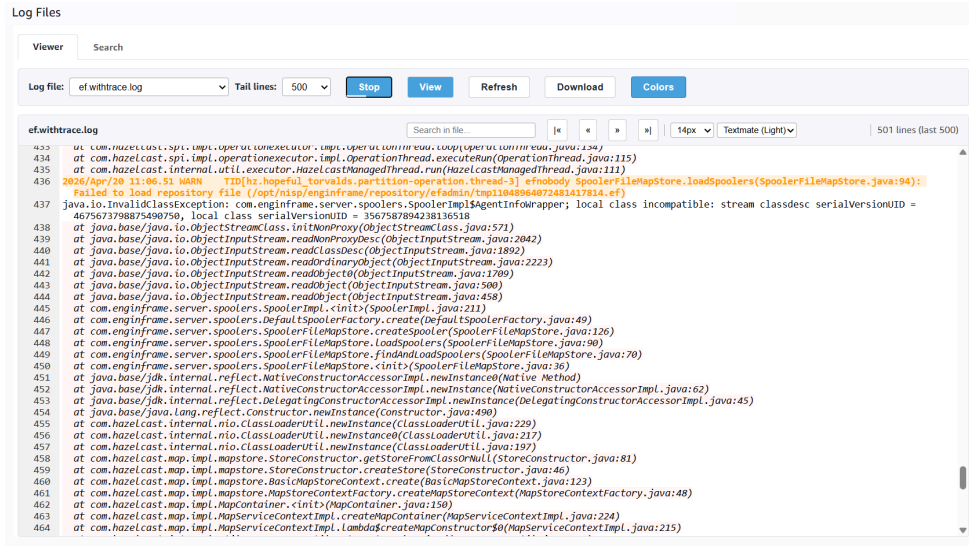


Log File Viewer

The new Log File Viewer in the Administrator Operational Dashboard offers

- Themed log file viewer integration
- Cross-file search with navigation and default keywords
- Direct link to search matches
- Tail mode with auto-refresh
- Log level color coding
- Multi-host support
- Cross-file keyword search with CSV export

Screenshot including enabled tail-mode and color coded errors of a log file:



Screenshot of matches for a predefined keyword with direct links to the location:

Log File	Matches	File Size	Last Matching Lines
dcvsm.log	548	16.8 MB	76035: 2026/Apr/04 16:54.35 ERROR TID[EngFramesScheduler_worker-2] efadmin DefaultSMuthTokenClient.renewToken(DefaultSMuthTokenClient.java:9)... 76038: 2026/Apr/04 16:57.35 ERROR TID[EngFramesScheduler_worker-8] efadmin DefaultSMuthTokenClient.renewToken(DefaultSMuthTokenClient.java:9)... 76041: 2026/Apr/04 17:00.35 ERROR TID[EngFramesScheduler_worker-6] efadmin DefaultSMuthTokenClient.renewToken(DefaultSMuthTokenClient.java:9)... 76044: 2026/Apr/04 17:03.36 ERROR TID[EngFramesScheduler_worker-10] efadmin DefaultSMuthTokenClient.renewToken(DefaultSMuthTokenClient.java:9)... 76047: 2026/Apr/04 17:06.36 ERROR TID[EngFramesScheduler_worker-3] efadmin DefaultSMuthTokenClient.renewToken(DefaultSMuthTokenClient.java:9)...
dcvsm.withtrace.log	405	4.9 MB	55059: org.apache.http.conn.HttpHostConnectException: Connect to dcvsmbroker.ni-sp.com:8448 [dcvsmbroker.ni-sp.com/3.122.137.49] failed: Connecti... 55212: io.swagger.client.ApiException: DCV SH error: Failed to retrieve new token 55471: 2026/Apr/04 17:06.36 ERROR TID[EngFramesScheduler_worker-3] efadmin DefaultSMuthTokenClient.renewToken(DefaultSMuthTokenClient.java:9)... 55472: org.apache.http.conn.HttpHostConnectException: Connect to dcvsmbroker.ni-sp.com:8448 [dcvsmbroker.ni-sp.com/3.122.137.49] failed: Connecti... 55625: io.swagger.client.ApiException: DCV SH error: Failed to retrieve new token
efwithtrace.log	241	5.8 MB	49453: 2026/Apr/21 09:01.19 ERROR TID[4365] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 49452: 2026/Apr/21 09:01.21 ERROR TID[4367] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 49453: 2026/Apr/21 09:03.30 ERROR TID[4933] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 49454: 2026/Apr/21 09:09.49 ERROR TID[5261] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 49455: 2026/Apr/21 09:51.45 ERROR TID[6016] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a...)
efllog	240	4.5 MB	33948: 2026/Apr/21 09:01.19 ERROR TID[4365] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 33949: 2026/Apr/21 09:01.21 ERROR TID[4367] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 33950: 2026/Apr/21 09:01.30 ERROR TID[4933] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 33951: 2026/Apr/21 09:09.49 ERROR TID[5261] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a... 33952: 2026/Apr/21 09:51.45 ERROR TID[6016] efadmin OptionInfoImpl.validateOptionInfoImpl.java:481: Service (/com.engineframe.grid/jobcache.a...)

Other Features and Enhancements

We have added a number of other enhancements to EF Portal:

- Technology Showcase: Added a comprehensive REST API demonstration to include practical use cases utilizing both EFPCClient and cURL
- Technology Showcase: Added implementation examples for creating new notifications using both JavaScript and Bash scripts
- Operational Dashboard: The CPU Load and JVM Usage widgets now display data for all servers in an EF Portal Enterprise installation
- Operational Dashboard: Introduced a viewer for Release Notes

- Slurm Plugin: Improved job status mappings when 'sacct' is used to interact with the scheduler
- Slurm Plugin: Added support for compact nodelist format
- Grid Plugin: Always use the host timezone offset for job submission to ensure the correct time is shown in the UI
- VDI: Link job ID in Session Details to the underlying Job Details page
- Service Editor: Preserve the scroll position of the options properties
- Service Editor: Show a description and a tooltip for each option widget
- UI: Show the pending reasons in the Jobs Details page
- UI: Display the cluster label in Host View when configured
- UI: Preserve the selected items in a list across refreshes
- UI: Introduced support for searching jobs by owner in the Jobs List
- UI: Disable the submit button after a service is submitted to prevent duplicate submissions
- UI: Each navigation menu item now exposes a CSS class (ef-nav-id-<service-id>) so that customers can target individual menu entries with custom CSS
- Applications / VDI: Added possibility to customize refresh interval in the List Services and List Interactive Services pages
- File Manager: Compute place name if description is missing in ef.places
- File Manager: Added configurable parameter to permit to follow symlinks outside the virtual root (vroot)
- File Manager / RFB: Display base place path in the location bar
- File Manager: Enable up arrow leading to parent folder
- Remote File Browsing: Save the last visited folder when it is loaded from a profile
- Authentication: Added configurable parameters for AD/LDAP filters
- Authentication: Added possibility to configure the URL to redirect after a logout
- Core: Improved <ef:redirect> tag with the newWindow attribute to open the target page in a new window or tab in the browser
- REST API: Added new service to list available tokens for the logged-in user Improved error reporting for Ajax service calls
- Improved independent control of EF Portal daemons via the 'enginframe' startup script
- LSF Plugin: Allow GPU info parser to handle non-numeric UT/MUT values
- LSF Plugin: Improved OS compatibility by initializing the execution environment through a configurable shell
- Job Cache: Improved handling of duplicate job entries when cluster IDs are missing or inconsistent
- PBS Plugin: Improve parsing of grid:execution-host GridML tag
- PBS Plugin: Added support for submitting interactive sessions on OpenPBS 23.06
- Hosts Info: Quick Commands are now shown also for Applications and VDI Administrators

Changes / Fixes / Upgrades

Following changes and fixes were applied:

- UI: Added configurable auto-refresh for the Jobs List and Spoolers List tables
- UI: Changed the default Jobs List ordering to descending by submission time
- Slurm Plugin: The "dcv2" feature is no longer required for interactive sessions
- Slurm Plugin: Added optional SLURM_INTERACTIVE_FEATURE parameter to specify custom constraints for interactive sessions
- DCV SM Integration: Session Recovery is now disabled by default
- Upgraded Apache Tomcat to version 9.0.115
- Upgraded Apache Derby to version 10.15.2.0
- Upgraded Apache Log4j to version 2.25.4
- Upgraded Apache Commons FileUpload to version 1.6.0
- Upgraded Apache Commons IO to 2.19.0
- Upgraded Apache Commons Lang to version 3.18.0
- Upgraded Apache Commons Logging to version 1.3.5
- Upgraded Apache Commons BeanUtils to version 1.11.0
- Upgraded AWS SDK for Java to version 2.40.17
- Upgraded C3P0 to version 0.12.0
- Upgraded SLF4J to version 2.0.16
- Upgraded Swagger UI to version 5.32.0
- Upgraded SnakeYAML to version 2.6
- Upgraded Swagger JAXRS2 to version 2.2.45
- Upgraded Node.js to version 22.22.2
- Upgraded Node.js modules used by Web Terminal and Proxy
- Removed Spring Framework dependency