What's New in EF Portal 2025.3

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EF Portal Web Proxy

The EF Portal Web Proxy provides a secure, centralized entry point for accessing web-enabled applications running on compute nodes, such as JupyterLab, Web terminal and DCV. Instead of requiring users to connect directly to multiple node ports (e.g., `node1:8443`, `node2:8891`), all traffic is funneled through a single, consistent EF Portal host and port. This greatly simplifies access and improves overall network security.

The Web Proxy listens on a single `PROXY_PORT` and acts as a reverse proxy, routing incoming HTTP, HTTPS, and WebSocket traffic to the correct backend host and port based on the request path.

Both static and dynamic routing patterns are supported, allowing the proxy to handle fixed endpoints as well as applications running on different nodes and ports.

Typical use cases include exposing JupyterLab and DCV sessions through stable, user-friendly URLs - without opening additional ports on compute nodes or exposing them directly to users.

Routing rules are defined in `$EF_TOP/conf/proxy/proxy-config.yaml`.
The proxy can route requests statically (fixed host/port) or dynamically (host and port extracted from the URL).

Here an example for accessing JupyterLab servers and Notebooks via the Web Proxy.

Example: Dynamic Jupyter routing

The proxy supports multiple Jupyter instances running simultaneously on different nodes and ports. To reach each session, you can use for example a path of the form: `/jupyter/<hostname>/<port>`

Example of `$EF_TOP/conf/proxy/proxy-config.yaml` configuration:

```
proxies:
  - path: "^/jupyter/[^/]+/[0-9]+"
    hostRegex: "^/jupyter/([^/]+)/[0-9]+"
    portRegex: "^/jupyter/[^/]+/([0-9]+)"
    secure: false
```

A preconfigured Jupyter Notebook service is available in the EF Portal and works out of the box when the proxy is enabled via the EF_ADDITIONAL_ROLES variable in the enginframe.conf file. You only need to set the proxy address variable in the Jupyter Notebook service configuration.

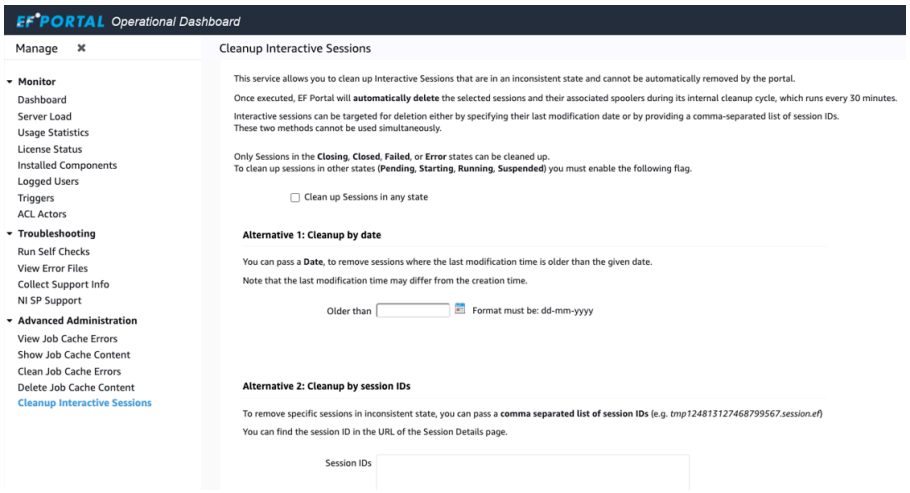
Updated EF Portal User Dashboard

We enhanced the EF Portal User Dashboard which is available on request with a number of features:

- Support for latest EF Portal 2025.3 and future versions.and can be used alongside the Administrator Dashboard
- The "Storage" widget now supports multiple mountpoints. Each mount point has its dedicated pie chart in the widget. The JSON schema for the widget has been adapted to support more endpoints so any custom scripts already developed can be adapted. Sample script and documentation have been updated
- Added auto-refresh feature for all widgets
- Various improvements to widgets load/refresh and error handling

New Services to Manage VDI Sessions

We added a services to cleanup Interactive Sessions and moved the Job Cache management services into an Advanced Administration section:



Other Features and Improvements

We have added a number of other enhancements:

- VDI: Show DCV error message in the session log if DCV session start fails e.g. related to missing license

- VDI: Added automatic closure of interactive sessions if the underlying job or delegate session remains in an unknown state for a configurable period
- Slurm Plugin: Improved job status mappings with additional states
- Slurm Plugin: Enhanced error reporting for failed interactive job submissions
- LSF Plugin: Show data for up to 8 GPUs per node in the Hosts view
- Improved automatic redirection to the login page when the web session expires
- REST API: Improved auditing and logging of REST calls
- REST API: The REST token creation service can be configured to output only the token value

Changes / Fixes / Upgrades

Following changes and fixes were applied:

- Web Terminal now connects via HTTPS by default
- Operational Dashboard: Job Cache monitor services have been moved into the Advanced Administration navigation folder
- Slurm Plugin: Refined parsing of host states to ensure nodes in a drain state are not treated as active
- Added setting INTERACTIVE_* variables in session starting hook for other hooks to use
- File Manager: Updated utility libraries to ensure compatibility with /bin/sh shell
- Auditing: Logout due to session expiration is now logged as a [LOGOUT] event
- File Manager: Improved compatibility of jQuery code used for Close button