



Contribution ID: 42

Type: 20 Minutes

EOS GUI - Simple way for EOS management

Thursday 27 April 2023 10:15 (20 minutes)

The Graphical User Interface (GUI) for CERN EOS could be crucial in the interaction between potential users and the EOS storage technology. The GUI could serve as an interface between a user and the complex EOS infrastructure, enabling non-experts to learn and discover EOS features seamlessly and effectively. This would help users interact with the storage infrastructure without needing to delve into technical complexities, making it easier to decide on the architecture and proposal for large storage organizations. Additionally, the GUI can provide a visually appealing and user-friendly interface that can enable users to carry out informative tasks such as monitoring data storage usage.

The first proposal for CERN EOS GUI is designed for the Microsoft Windows platform. The proposal specifies technologies for GUI that allow extensions to all major operating systems, resulting in an interface accessible to all users regardless of their preferred platform, including Linux and MacOS. The GUI focuses on usability and functionality, featuring intuitive navigation, clear labeling of buttons and controls, and informative feedback mechanisms. The goal is to cover three functionalities related to EOS Windows Native Client:

- a) Interface to EOS commands (EOS-shell).
- b) Interface to EOS cluster mounted as Windows drive letter (EOS-drive).
- c) Interface to all functionalities covered by EOS commands.

EOS GUI is intended to provide two ways of starting:

- 1) Start a program executable from the start menu or command line.
- 2) Start from a popup list from the system tray icon.

Thus, starting the same program can be made available from multiple entry points, making it easier for users to access the GUI.

The EOS GUI should be organized into three window forms:

- a) Main EOS window.
- b) Popup list from the system tray icon.
- c) Other popup windows.

The main window would cover all EOS features available with EOS commands. The format of the main EOS window is proposed as tabs, icons, or “office style”. For each of these proposed formats, all EOS features should be grouped in three to five groups represented by separate tabs, icons, or “office-style” buttons. The popup list from the system tray icon should provide shortcuts to frequently used functions, such as connecting/disconnecting EOS drives and opening the main EOS window. Other popup windows should cater to specific functionalities, such as showing detailed storage usage.

The GUI for EOS should be technically implemented as a program/application or as a Web GUI. Overall, the proposed EOS GUI should provide a user-friendly and accessible interface that allows users to carry out tasks related to EOS commands and data storage. The proposed EOS GUI is designed to provide an efficient and accessible interface for users of all levels to perform tasks related to EOS commands and data manipulation. It is not designed to replace EOS CLI but to complement it while providing a more user-friendly alternative for those less comfortable with command-line interfaces.

In summary, the proposed EOS GUI aims to provide a user-friendly interface for managing CERN EOS storage. The GUI is proposed for the Microsoft Windows platform; however, the technologies used would allow extensions to all major operating systems.

Primary author: MOLAN, Gregor (Comtrade 360's AI Lab)

Co-authors: BLAGOJEVIC, Branko (Comtrade); ARIZANOVIC, Ivan (Comtrade 360's AI Lab)

Presenter: MOLAN, Gregor (Comtrade 360's AI Lab)

Session Classification: EOS Ecosystem

Track Classification: EOS, Data Management and Applications