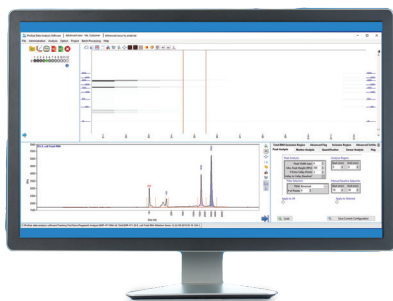


# Enhanced Security Features of Fragment Analyzer Controller and ProSize Data Analysis Software



## Key features:

- System Configuration
- Account Management
- User Role Management
- Data approval
- Audit trail (data event log and system event log)
- Reporting

The Agilent Fragment Analyzer controller and ProSize data analysis software offer an enhanced security mode, providing customers with more control over their data. This mode offers security features such as multiple user's account set up, user-controlled data access, electronic data approval, tracking and logging of system and data activities as well as electronic documentation.

## System Configuration

System configuration allows user to define system login credentials, which include auto log off time, minimum length and password expiration time, login attempts, and number of unique passwords.

Access to the system under active enhanced security mode is controlled via individual internal authentication by specific user login information. When the enhanced security mode is enabled, an encrypted database .db3 file is automatically created to securely store all the acquired data.

## Account Management

User accounts are determined during the system set up and specified by user-name, user ID, password and access level. E-mail information can be included in the configuration settings, allowing users to receive alerts due to failed login attempts and run completion and/or fail.

# Role Management

The user roles define the access level and permissions allocated to each named user to perform certain tasks, such as setting up a system and data management. Various user role levels are available with Fragment Analyzer controller and ProSize enhanced security mode. The user roles are defined as Administrator, Advanced User and User and will establish authority checks required when working with controlled data access to perform tasks adequately. A summary of the features available for each of the user roles is defined in Table 1.

# Data Approval

Data Approval requires an electronic signature with a unique user ID and a password. During the approval process, an enforced workflow is automatically set up with 3 steps as author, reviewer, and approval. The workflow requires a data "Lock" between the three steps to continue with the approval process until the data is fully approved. All the events performed during these steps are recorded and available in the "File Lock Records" entry as well as in the data event audit records. The Figure 1 illustrates the Data approval workflow.

# Audit Trail

## Data event log and system event log

The data event log keeps track of all the changes performed by a user to a .db3 file. These activities are recorded in chronological order and cannot be modified by any user.

The event report records operations made in the system, e.g., Fragment Analyzer controller and ProSize software, for all registered users. It tracks the entire activity history from the time the enhanced security mode has been enabled, including all relevant information about the changes, such as: user ID, computer name, event time, operation done with event description performed and file paths.

The system activity log filter and audit trail entry logs can be reviewed, printed, or exported as PDF and .CSV files.

Table 1. User role management: Feature description and accessible software

| Access Level  | Feature                                                                                                                                                                                               | Software                                                                                                       |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Administrator | <ul style="list-style-type: none"><li>– Create, manage and disable user accounts</li><li>– Change user information</li><li>– Modify login settings</li></ul>                                          | <ul style="list-style-type: none"><li>– Fragment Analyzer controller</li><li>– ProSize data analysis</li></ul> |
| Advanced User | <ul style="list-style-type: none"><li>– Set default data file path</li><li>– Define configuration settings, language, array format and display mode</li><li>– Access all analysis functions</li></ul> | <ul style="list-style-type: none"><li>– ProSize data analysis</li></ul>                                        |
| User          | <ul style="list-style-type: none"><li>– Limited analysis functions</li><li>– Run samples</li><li>– View event report and data event log</li></ul>                                                     | <ul style="list-style-type: none"><li>– Fragment Analyzer controller</li><li>– ProSize data analysis</li></ul> |

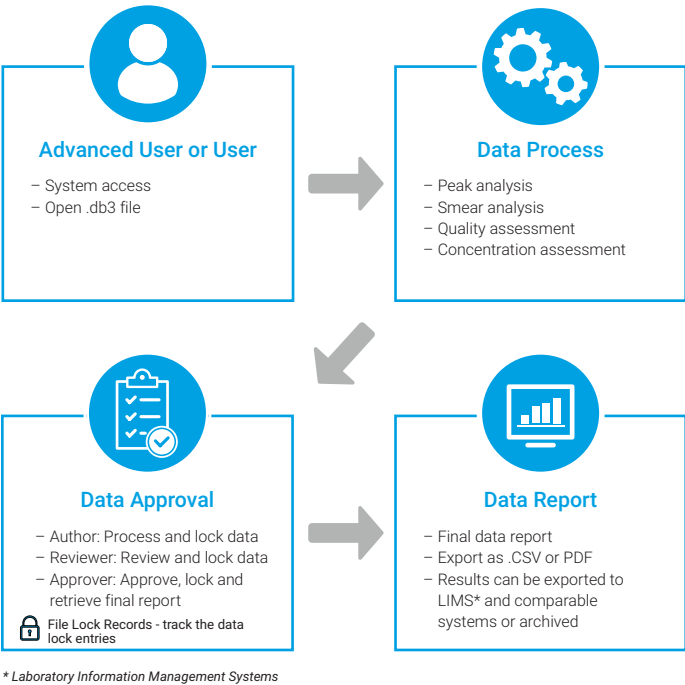


Figure 1. Data approval workflow supported by ProSize Enhanced Security mode.

[www.agilent.com/en/product/automated-electrophoresis/fragment-analyzer-systems/fragment-analyzer-systems-software](http://www.agilent.com/en/product/automated-electrophoresis/fragment-analyzer-systems/fragment-analyzer-systems-software)