**Use Case Specification**

Use Case ID: serverLogin  
Use Case Name: Server login

Relevant Requirements: Random Id and password that is 10-16 characters in length.

Primary Actor: User

Pre-conditions: User want to login.

Post-conditions: Server grant access to files and file list.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: listAllAvalibleFile  
Use Case Name: List all available file

Relevant Requirements: Valid client verification and credential.

Primary Actor: User

Pre-conditions: User want to file list.

Post-conditions: Server grant file list.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: superiorLogin  
Use Case Name: Superior login

Relevant Requirements: Random Id and password that is 10-16 characters in length.

Primary Actor: Manager/IT

Pre-conditions: Manager/IT want to login.

Post-conditions: Server grant access to files and config.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: serverLogs  
Use Case Name: Server logs

Relevant Requirements: update every action that is run by server with time stamp.

Primary Actor: Server

Pre-conditions: Read in log file.

Post-conditions: Server logged action.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: retrieveFile  
Use Case Name: Retrieve file.

Relevant Requirements: Valid file and credential.

Primary Actor: User

Pre-conditions: User want specific file.

Post-conditions: Server grant access to file.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: uploadFile  
Use Case Name: Upload File

Relevant Requirements: Valid credential and original name.

Primary Actor: User

Pre-conditions: User want to upload file.

Post-conditions: Server grant saved file and distribute file to nodes.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: uploadFile  
Use Case Name: Upload File

Relevant Requirements: Valid credential and original name.

Primary Actor: User

Pre-conditions: User want to upload file.

Post-conditions: Server grant saved file and distribute file to nodes.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: uploadFile  
Use Case Name: Upload File

Relevant Requirements: Valid credential and original name.

Primary Actor: User

Pre-conditions: User want to upload file.

Post-conditions: Server grant saved file and distribute file to nodes.

Basic Flow or Main Scenario:

User with valid credentials, no permissions granted:

1. User provides valid credentials but account has no permissions granted.
2. System responds by allowing login but denying access Pump Control or System Logs.

User with Operator account credentials:

1. User tries to log in to Operator account
2. System responds by granting Operator-level permissions to the user.

User with Supervisor account credentials:

1. User tries to log in without any permissions granted
2. System responds by denying the login.

Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases:

Use Case ID: uploadFile  
Use Case Name: Upload File

Relevant Requirements: Valid credential and original name.

Primary Actor: User

Pre-conditions: User want to upload file.

Post-conditions: Server grant saved file and distribute file to nodes.

Basic Flow or Main Scenario:

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Extensions or Alternate Flows: None.

Exceptions:

Related Use Cases: