# SkyPortal Access Control List (ACL) Documentation

# Role-Based ACL Assignments

#### Super Admin

• Has ALL ACLs (complete system access)

#### **Group Admin**

- Annotate
- Comment
- Classify
- Manage shifts
- Manage sources
- Manage users
- Manage observing runs
- Manage Analysis Services
- Manage Recurring APIs
- Manage GCNs
- Upload data
- Run Analyses
- Post taxonomy

#### Full User

- Annotate
- Comment
- Classify
- Upload data
- Run Analyses
- Manage observing runs

#### View Only

• No ACLs (read-only access)

# **ACL Descriptions**

# **User Management**

#### Become user

Allows: Impersonate/become another user account using for example : <a href="http://localhost:5000/become\_user/1">http://localhost:5000/become\_user/1</a> (1 is the ID of the user in the database)

#### Use Cases:

- Debugging user-specific issues
- Testing user permissions
- Administrative troubleshooting

#### Manage users

Allows: Comprehensive user account and permission management Use Cases:

- Create, update, and delete user accounts
- Manage user invitations to the system
- Grant/revoke ACLs and roles
- Invite users to groups
- View user profiles and settings

#### Manage groups

Allows: Create and manage groups and their memberships Use Cases:

- Create new groups
- Update group settings
- Delete groups
- Manage group memberships
- Configure group streams
- Set group permissions

# Data operations

#### Comment

Allows: Create, edit, and delete comments on astronomical objects Use Cases:

- Post comments on sources, spectra, GCN events, earthquakes, or shifts
- Update existing comments
- Remove comments
- Add bot-generated comments via API

Comments format is free from text.

#### **Annotaate**

Allows: Add structured metadata (annotations) to astronomical objects Use Cases:

- Create annotations with structured JSON data
- Update existing annotations
- Remove annotations
- Import data from external annotation services

Annotations format is JSON.

#### Upload data

Allows: Upload new astronomical data to the system Use Cases:

- Upload photometry data
- Upload spectroscopic data
- Add new sources and candidates
- Create followup requests
- Save candidates to groups as sources
- Upload thumbnails and images
- Create filters for data streams
- Share data between groups
- Upload spatial catalogs
- Upload galaxy catalogs
- Create instrument logs
- Record observations
- Create photometric series
- Upload skymap triggers

Does NOT include deletion or modification of existing data

#### Classify

Allows: Assign and manage astronomical classifications Use Cases:

- Create classifications for sources
- Update existing classifications
- Remove classifications
- Assign classification probabilities

#### Post taxonomy

Allows: Create and update classification taxonomies Use Cases:

- Create new classification taxonomies
- Define classification schemes (e.g., supernova types)
- Update existing taxonomies
- Configure classification hierarchies

### Delete taxonomy

Allows: Remove classification taxonomies from the system

## Delete bulk photometry

Allows: Bulk deletion of photometry data

Use Cases:

- Delete large batches of photometry by upload\_id
- Delete all photometry from a specific stream

# Source & Object Management

#### Manage sources

Allows: Manage astronomical sources and their metadata Use Cases:

- Modify source-level metadata
- Validate and invalidate photometry points
- Add/remove tags from sources
- Manage thumbnails for sources
- Create and manage public release pages
- Create and manage public source pages
- Delete sources

This ACL is for managing existing source records Includes photometry validation (marking points as valid/invalid)

#### Manage photometry

Allows: Modify photometry data for objects in accessible groups Use Cases:

- Update photometry records
- Delete photometry records
- Modify photometry metadata
- Only affects objects accessible to user's groups

Users without this ACL can only modify their own photometry uploads

#### Observational Infrastructure

#### Manage telescopes

Allows: Add and update telescope records

Use Cases:

- Add new telescopes to the system
- Update telescope information (name, location, diameter, etc.)

#### Delete telescope

Allows: Remove telescope records from the system Use Cases:

• Delete telescopes that are no longer in use

#### Manage instruments

Allows: Add and update telescope instruments Use Cases:

- Add new instruments to telescopes
- Update instrument configurations
- Manage instrument fields (FOVs)
- Configure instrument bands and filters
- Set up instrument regions

#### Delete instrument

Allows: Remove instrument records from the system Use Cases:

Delete obsolete instruments

#### Manage allocations

Allows: Manage telescope time allocations Use Cases:

- · Create allocations linking groups to instruments
- Update allocation details (hours, PI, etc.)
- Remove allocations
- Configure allocations for different request types:
  - Triggered observations
  - Forced photometry
  - Observation planning
- Manage MMA detector allocations
- Configure GCN-related allocations

# Manage observing runs

Allows: Schedule and manage observing runs Use Cases:

- Create scheduled observing runs
- Update run details (dates, observers, etc.)
- Assign sources to observing runs
- Plan classical observing campaigns

## Manage observation plans

Allows: Create and manage observation planning and scheduling Use Cases:

- Create observation plans for targets
- Schedule observations across multiple telescopes
- Send observation plans to telescopes
- Manage plan requests

- Integrate with Treasuremap for GW follow-up
- Plan tiled observations
- Optimize observing schedules

#### Manage shifts

Allows: Manage observing shifts

Use Cases:

- Create observing shifts
- Assign users to shifts
- Update shift details
- Remove shifts

# **Analysis & Processing**

#### Manage Analysis Services

Allows: Configure and manage automated analysis services

Use Cases:

- Register new analysis services
- Update analysis service configurations
- Configure service parameters and resources
- Remove analysis services

#### Run Analyses

Allows: Execute analysis services on astronomical data

Use Cases:

- Run analysis on sources
- Update analysis results
- Delete analysis results
- Execute automated processing tasks

#### **External Services**

# Manage GCNs

Allows: Manage GCN (Gamma-ray Coordinates Network) events and notices Use Cases:

- Send GCN notices to the community
- Manage GCN event tags
- Submit GCNs to TACH (The Astronomer's Clearing House)
- Query and post to GraceDB (LIGO/Virgo gravitational wave database)
- Manage confirmed sources in GCN events
- Handle multi-messenger astronomy events

#### Manage sharing services

Allows: Configure external sharing services (TNS, ALeRCE, etc.)

Use Cases:

- Configure sharing service integrations (e.g., TNS Transient Name Server)
- Manage coauthors for sharing services
- Associate groups with sharing services
- Configure auto-publishing rules
- Set up automated data sharing

#### Manage Recurring APIs

Allows: Schedule and manage automated recurring API calls

Use Cases:

- Create recurring API call configurations
- Schedule periodic automated operations
- Update recurring API settings
- Remove scheduled API calls

#### Post from SEDMListener

Allows: Receive and process messages from SEDM telescope facility Use Cases:

- Receive automated status updates from SEDM
- Process followup request responses
- Update request status based on facility feedback

# System Administration

#### System admin

Allows: Full system administrative access

Use Cases:

- Manage streams (alert streams)
- System-level thumbnail operations
- Manage comment attachments
- Advanced galaxy catalog operations
- Manage HEALPix localizations
- System-level GCN operations
- View database statistics
- View system logs
- Become other users
- Override sharing restrictions
- All group management operations
- Calculate photometry statistics
- Full system configuration