

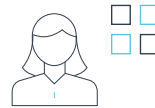
# Authentication and Authorization

## Login Types



### TrakSYS

Defined and Managed **within** TrakSYS  
Must Login with **Username and Password**  
Can be used from **any** Browser/Device  
Ideal for identifying Users on Shared Clients



### Windows (Integrated)

Defined and Managed **external** to TrakSYS  
**Automatically passed via Brower** based on Windows Login  
Internet Explorer | Edge | Chrome on **Windows Client**  
Ideal for personal Laptops / Desktops



### Open Connect

Defined and Managed **external** to TrakSYS  
Must Login with **Username and Password**  
Redirected to **Provider's** Login Page  
Ideal for non-Domain Devices

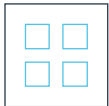


### Considerations

Shared Workstations on Plant Floor with Roaming Users  
Shared Workstations with same/different Windows Account  
Permissions by Location/Workstation  
Use a Common Login and check/record User as Needed

# Authentication and Authorization

## User Grouping

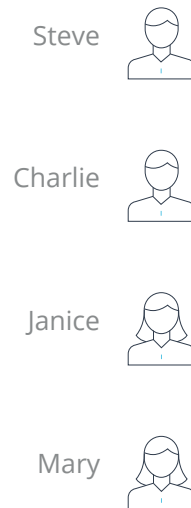


### TrakSYS User Groups

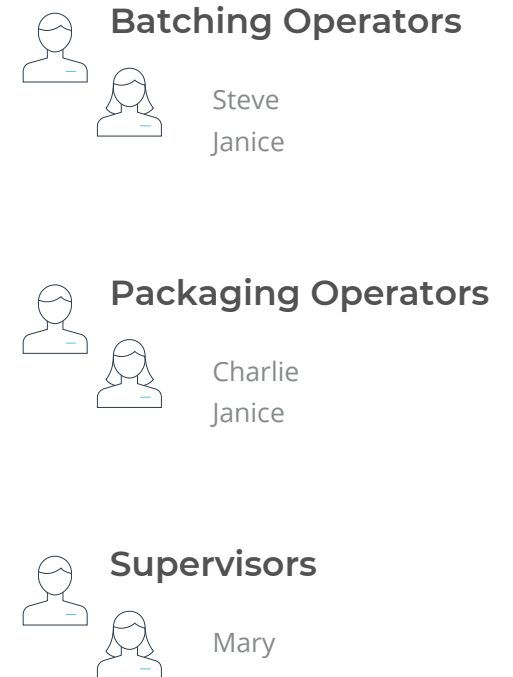
The following point characterize the capabilities of [TrakSYS User Groups](#)...

- [Any type of User](#) (TrakSYS, Windows or Open Connect) can be added to a TrakSYS User Group.
- A single User can be a member of [any number of Groups](#).
- Groups can be [assigned to Roles](#) to allocate Permissions (typically a better strategy than assigning users individually).
- Groups can be the [target of Notifications](#).

### Users

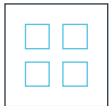


### User Groups



# Authentication and Authorization

## Roles

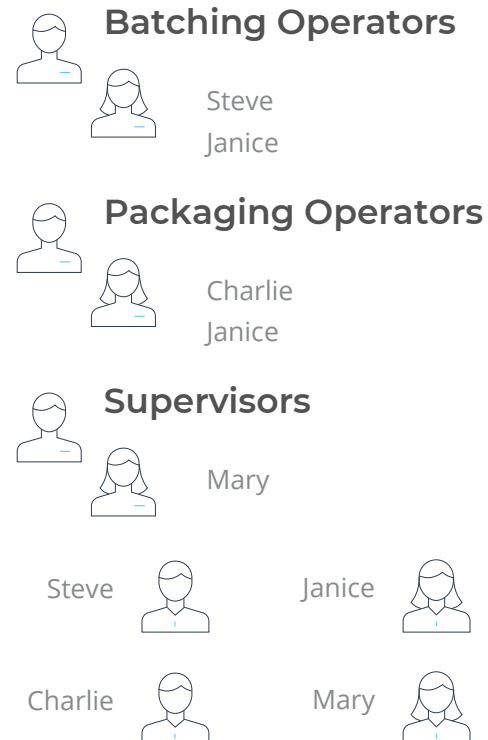


### TrakSYS Roles

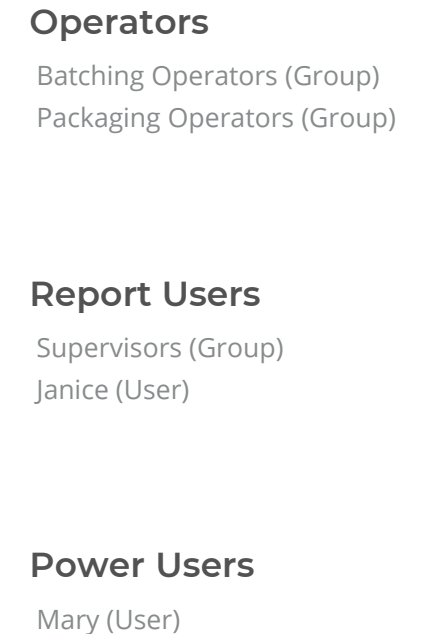
The following point characterize the capabilities of [TrakSYS Roles](#)...

- Roles contain [one or more Permission assignments](#) that indicate which pages and functions/operations are allowed.
- [Individual Users](#) can be assigned to a Role.
- [User Groups](#) can be assigned to a Role.
- Users and Groups can be assigned to [more than one Role](#).

### Users and Groups

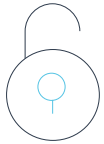


### Roles



# Authentication and Authorization

## Page Permissions



### Page Permissions

A Role can be associated with one or more [Page Permissions](#) which indicate how Users within the Role can access the user interface.

A Page Permission is made up of a [URL](#) and an [Ability](#) assignment as follows...

#### URL

A specific [Page](#) within the TrakSYS UI hierarchy.

#### Yes to All

Role Users can access the URL Page [and its children](#).

#### Yes

Role Users can access the URL Page, [but not its children](#).

#### No Access

Role Users [cannot](#) access the URL Page.

### Desired Access



Page 0 (Section)



Page 1 (H1)



Page 2 (H1)



Page 3 (H2)



Page 4 (H2)



Page 5 (H3)



Page 6 (H3)



### Operators (Role)

Batching Operators (Group)  
Packaging Operators (Group)

#### Page Permissions

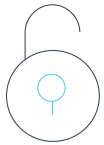
Page 0 | Yes  
Page 2 | Yes to All  
Page 5 | No Access

OR

Page 0 | Yes to All  
Page 1 | No Access  
Page 5 | No Access

# Authentication and Authorization

## Standard Permissions



### Standard Permissions

A Role can be associated with one or more [Standard Permissions](#) which indicate [hard coded privileges](#) for Users within the Role.

### TrakSYS Standard Permissions

	Allow
Administrator	<input type="checkbox"/>
AdministratorService	<input type="checkbox"/>
AdministratorServiceControl	<input type="checkbox"/>
AdministratorUser	<input type="checkbox"/>
AdministratorDiagnostics	<input type="checkbox"/>
Translator	<input type="checkbox"/>
Auditor	<input type="checkbox"/>
AllowReservedUser	<input type="checkbox"/>

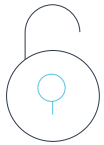
### TrakSYS Configuration and Data Permissions

	<input type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Modify	<input type="checkbox"/> Delete
AccessName	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AccessNameGroup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AccessNameOleDb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AccessNameOleDbParameter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/> Create	<input type="checkbox"/> Modify	<input type="checkbox"/> Delete
AccessNameHistorianState	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AccessNameState	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AuditUserActivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Batch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BatchParameter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Authentication and Authorization

## Custom Permissions



### Custom Permissions

A Role can be associated with one or more [Custom Permissions](#) which indicate [solution-specific privileges](#) for Users within the Role.

### Flat Permission Set Example

[Root](#) > [Administration](#) > [Permissions](#) > [Quality](#)

#### Permissions

##### Quality

[Edit](#)

ID 11  
Name Quality  
Key Quality  
Permission Type Flat

##### Related

[Items](#)

[Audit Trail](#)

##### Actions

[Change Key](#)

[Delete](#)

##### Items

[+ New](#)

Audit View  
Audit\_View

SPC Edit  
SPC\_Edit

Tasks Edit  
Task\_Edit

[OCV](#) > [Administration](#) > [Roles](#) > [OCV Batching Operators](#)

#### OCV Batching Operators

##### Role

###### General

###### Name

OCV Batching Operators

###### TrakSYS

###### Configuration

###### Data

###### Maintenance

###### Quality

###### Training

###### Notes

###### Allow

Audit View

☐

SPC Edit

☐

Tasks Edit

☐

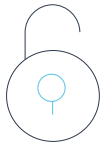
Apply

Save

Cancel

# Authentication and Authorization

## Custom Permissions



### Custom Permissions

A Role can be associated with one or more [Custom Permissions](#) which indicate [solution-specific privileges](#) for Users within the Role.

### Grid Permission Set Example

Root > Administration > Permissions > Training

#### Permissions

##### Training

[Edit](#)

ID 9

Name Training

Key Training

Permission Type Grid

##### Related

[Items](#)

[Actions](#)

[Audit Trail](#)

##### Actions

[Change Key](#)

[Delete](#)

##### Items

[+ New](#)

##### Event

Event

##### Sample

Sample

##### Task

Task

Root > Administration > Permissions > Training

#### Permissions

##### Training

[Edit](#)

ID 9

Name Training

Key Training

Permission Type Grid

##### Related

[Items](#)

[Actions](#)

[Audit Trail](#)

##### Actions

[Change Key](#)

[Delete](#)

##### Actions

[+ New](#)

##### Create

Create

##### Edit

Edit

##### View

View

OCV > Administration > Roles > OCV Batching Operators

#### OCV Batching Operators

##### Role

##### General

TrakSYS

##### Configuration

Data

Maintenance

Quality

Training

Notes

##### Name

OCV Batching Operators

☐ Create

☐ Edit

☐ View

Event

☐

☐

☐

Sample

☐

☐

☐

Task

☐

☐

☐

Apply

Save

Cancel

# Checking Permissions from Script



## Checking Permissions

Standard or Custom permissions can be verified programmatically (within TS Web) by calling the following API method...

## Has Permission

```
this.Ets.HasPermission(string set, string item, [string action]);
```

Permission Set Key

OR from ETS.Core.Api.PermissionKeys...

- EntitySet
- EtsSet

Item Key

OR...

- Area
- System
- Event
- Etc...

OR from ETS.Core.Api.PermissionKeys...

- ItemsAdmin
- ItemsAdminService
- ItemsAdminServiceControl
- ItemsAdminUser
- ItemsAdminDiagnostics
- ItemsTranslator
- ItemsAuditor
- ItemAllowReservedUser

Action Key

OR from ETS.Core.Api.PermissionKeys...

- EntityActionView
- EntityActionCreate
- EntityActionModify
- EntityActionDelete