Nuance® **Equitrac**®

UX Training

Session 2
June 22, 2017

authentic insight

UX Training Session Topics

- First 2 sessions – focus on Pattern Guide

- Session3: Foundations of User Experience/Information Architecture deep dive

- Session4: Visual Design/Copy (writing)

- Session5: General Best Practices

- URL access: training.authenticinsight.com Sign up!

Last Week…

- Reviewed Equitrac Pattern Guide

- Focused on web application STRUCTURE

- The CONTEXT of the application "features"

- Where things "live" & getting the user to where they need to go

Reviewed:

- Navigation (primary, secondary, page level navigation)

- Page types

How do I find what I need in the Pattern Guide?

Answer 3 questions first...

How does the user access the feature?

Where does it "live" in context of the application's existing navigation model?

We reviewed the application's navigation model and patterns.
(Navigation Section of the Pattern Guide)

Now you've determined how the user accesses the feature...

What page type/layout is most appropriate?

We reviewed the different page types that have been established and when/why each is used.
(Page types section of the Pattern Guide)

Once the navigation and page type context has been determined (or if your feature is accessed from an existing page)...

How do I know which components/interactions are best suited for my new feature?

To answer this we'll review items and interactions that go a page:

- *Information & Text (communicating to the user)*
- *Controls & Widgets (components that make up a page)*
- *Tables*
- *Save Models, Validation & Errors*
- *Modal Windows*
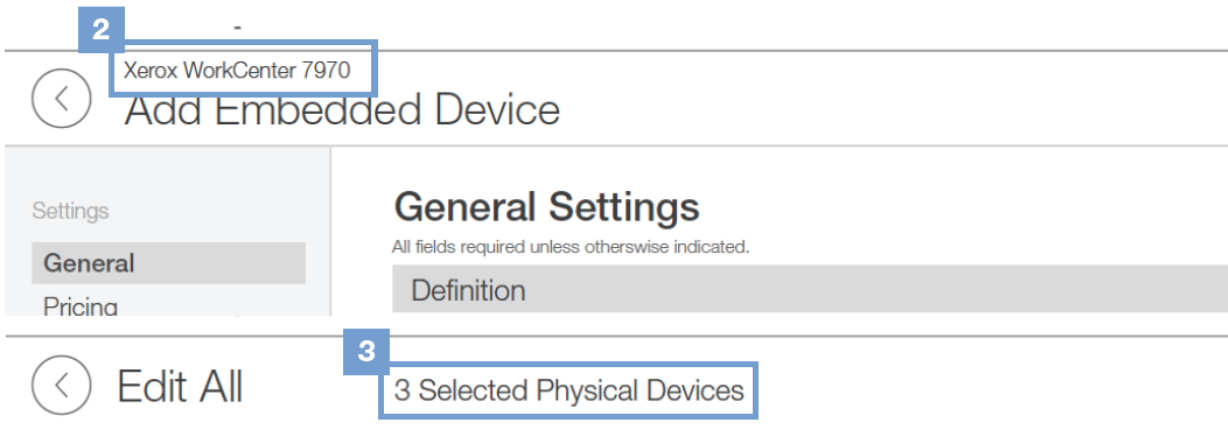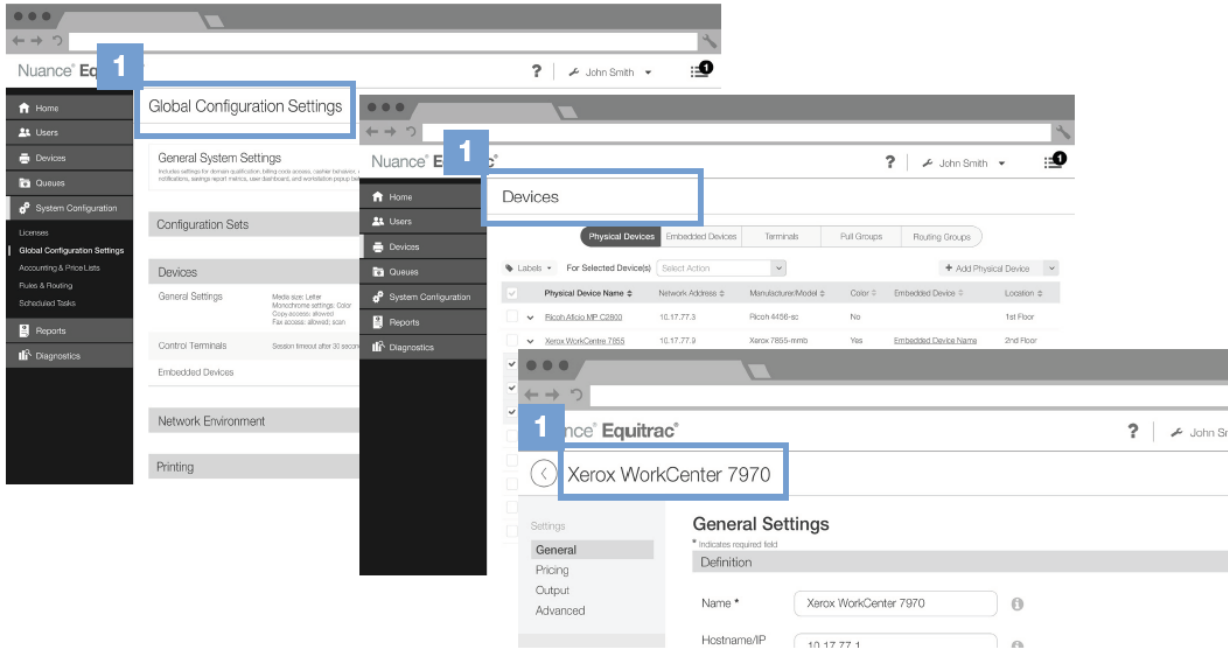- *Stepped Workflow*

1. Information & Text

Communicating to the user

Page Titles (Pattern Guide p 25)

UX Principle:

Make clear to the user where they are

All screens must have a title

Page Titles

1   **Page Titles** - all screens must have a title. The position of the title varies according to the Page Type.

2   **Page Titles with Parent Object Info** - the parent object information is displayed with the primary Page Title when objects are added/edited in context of an associated "parent" object. In this example "Add Embedded Device" is the primary Page Title and "Xerox WorkCenter 7970" is the parent object information.

Note: The parent object text is not a link, and is for informational purposes only.

3   **Page Titles with Number of Items** - in scenarios where a user has selected multiple items on the "parent" page and then chosen to edit all their common properties, a page display of the common properties is used (rather than a modal window for a single edit action).

In this case, the number of selected items that the user previously selected on the parent page, is passed through to the edit (common) properties page title.

Also refer to "Page Form Display - Multiple Selected Items Edit All" on page 19.

Indicators (Pattern Guide p 26-33)

UX Principle:

Let the user know what's going on....

Indicators are used to give feedback to the user that the system is "working"...

Used for:

- Saving

- Loading

- Progress for a system process

Indicator Examples

Saving

Loading

Progress Bars – Determinate & Indeterminate

Notifications (Pattern Guide p 34)

UX Principle:

Let the user know what's going on….

Alert/Toast

- Non intrusive notification
- Used to inform the user of a successful (or unsuccessful) action:
  - Saving
  - Deleting
  - Importing

Notifications - Alert/Toast

Devices

1

The physical device **Xerox WorkCentre 7970** has been deleted

Physical Devices	Embedded Devices	Terminals	Custom Views

Showing 1 to 100 of 562 Physical Devices   ↱ Export/Print   ▼ Filter   + Add Physical Device

		Name ⌄	Network Address	Manufacturer	Model	Color	Location	Pull Group	Server
☐	⌄ 🖨	Ricoh Aficio MP C2800	10.17.77.3	Ricoh	Ricoh 4456-sc	No	1st Floor		
☐	⌄ 🖨	Xerox WorkCentre 7855	10.17.77.9	Xerox	Xerox 7855-mmb	Yes	2nd Floor		
☐	⌄ 🖨	Xerox WorkCentre 7970	10.17.77.1	Xerox	Xerox 7970	Yes	2nd Floor		

2

Nuance Card Reader imported and assigned to Xerox WorkCentre 7970 - Configure

Physical Devices	Embedded Devices	Terminals	Pull Groups	Routing Groups

1 **Update Notification** - after an object is updated, added, saved, deleted, or imported, a notification is displayed to confirm the results of the action.

2 **Update Notification with Link** - the notification message can include a link, so as to facilitate navigation to the next step in a workflow.

All alert/toast notifications appear temporarily (30 seconds) before disappearing. The user has the option to select an "x" to close/dismiss the notification.

Notes:

The alert/toast component includes an "x" to close which is not reflected in the wireframe designs.

If the Alert/Toast is displayed at the same time as the Hidden State Progress overlay window, then the Hidden State Progress remains positioned at the top of the screen and the Alert/Toast is displayed beneath it.

Refer to "Progress - Hidden State" on page 31.

Notifications (Pattern Guide p 35-36)

UX Principle:

Let the user know what's going on....

Alerts & Warnings

- Higher impact notification
- Used for scenarios where we want to inform the user the state of the system, or the impact of an action

Alert Examples

License

⊖ Your Equitrac system requires a new License. [Install & Activate New License]

License Key   7303-0372-8285-9854   Customer   **Acme Company**
Serial Number **106**   **Gainesville, FL**
⊖ License Status **Version 6.0.1.2 default installation license**

Add Printer/Driver ✕

⊖ Printer Model, Environment and OS Version combination has already been mapped to a print driver.

Model Name	WorkCentre 7855 ⌄	⊖
Environment	x64 ⌄	⊖
OS Version	Windows 7 ⌄	⊖
Package Name	Xerox7855PCL6-Win-64-bit ⌄	ⓘ
Driver Name	Xerox WorkCentre 7855 PCL 6 ⌄	

Warning Examples

What to Run *

⚠ Running a Command can adversely affect your System. Ensure you are familiar with the Command you specify to run.

Command Line * [   ] [...]

Working
Directory *   [   ]

Configure Component ✕

⚠ Update Component configuration only upon guidance from Equitrac Technical Support.

LastAuthUpload   [AQAAAn+EkRRpWal3UGU]

[Save]   [Cancel]

More Information Display

UX Principle:

Provide further information on a need to know basis (reduces screen clutter)

- Summary information display

- "Dynamic" detail information display

More Information Display Examples

Summary Information

Rule Set & Rules	Description	
∧ Rule Set1	This is Rule Set1 Description	✚ New Rule ∨

Rules	Type
weekend printing	All
another rule	All

← Select a Rule to view its type, actions and conditions

∨ Rule Set2	This is Rule Set2 Description	✚ New Rule ∨

✚ New Rule Set

Rule Set & Rules	Description	
∧ Rule Set1	This is Rule Set1 Description	✚ New Rule ∨

Rules	Type
weekend printing	All
another rule	All

⬆ ⬇   ✏ Edit Rule ∨

Rule   weekend printing

Type
Apply this rule when a user prints a document through the print server and workstation direct IP printing.

Action
Allow this job to complete

Condition(s)
When the day of the week is: Saturday, Sunday

∨ Rule Set2	This is Rule Set2 Description	✚ New Rule ∨

Summary Information

When to Run

Schedule *	Daily ∨	
Repeat Every *	1 ∨	days
Start Date *	02/20/2017 📅	
Start Time *	0:00 AM 🕐	
End Date	⊘	
Summary	Daily, Repeat every 1 day, Start Date 02/20/2017, No End Date	

Dynamic Detail Information

Name *	Enter Rule Name

Type *	Apply this rule to...
	Server and workstation direct IP printing ∨

Apply this rule when a user prints a document through the print server and workstation direct IP printing

Action *	Allow this job ∨

Allow this job to complete

Condition(s)	Add Condition

Information & Text Recap

- Make clear to the user where they are
  - Use Page/Screen Titles

- Let the user know what's going on
  - Use Indicators – for loading, saving & progress
  - Use Notifications - for success/unsuccessful result of an action "Alert/Toast" & Alerts & Warnings

- Provide further information on a need to know basis
  - Summary information
  - "Dynamic" detail information

2. Controls & Widgets

UI components that go on a page

Navigation Controls (Pattern Guide p 40-41)
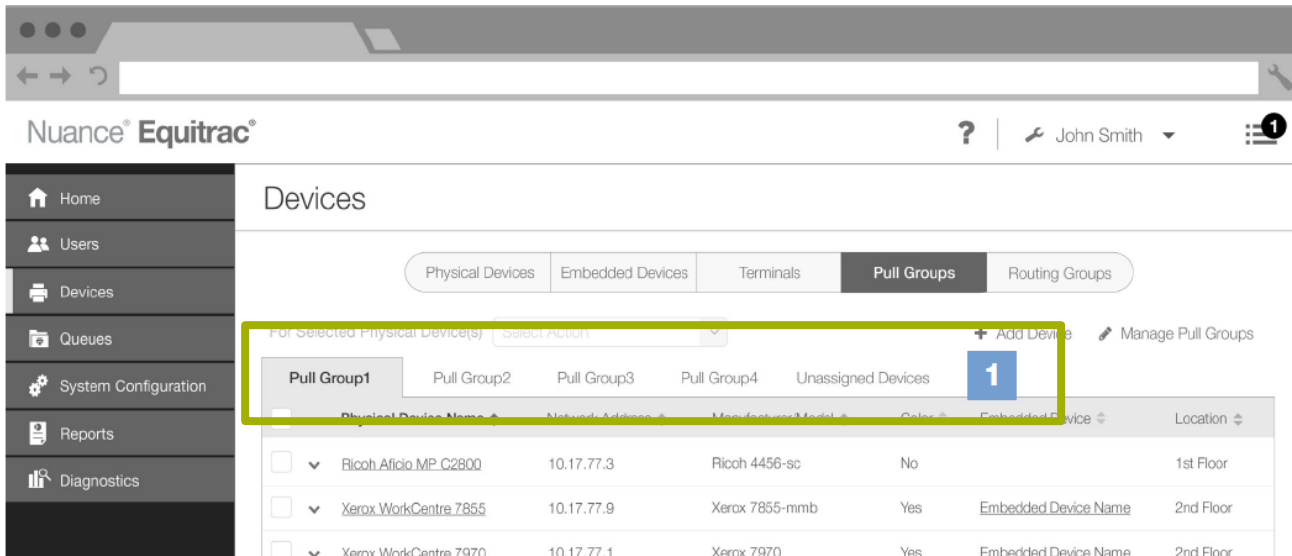
Provides further structured navigation to areas of the application

Tab Navigation

1 | **Top Level Tabs** - top level tabs are used for page level navigation. The tab selection drives the content that is displayed on the page below the tabs.

Top Level Tabs should be fixed at the top of the screen (under the page title). If there is a page scroll, the tabs stay visible & fixed in place, and the user can access them for navigation.


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? | John Smith ▾

Home
Users
Devices
Queues
System Configuration
Reports
Diagnostics

Devices

1 | Physical Devices | Embedded Devices | Terminals | Pull Groups | Routing Groups

Labels ▾ For Selected Device(s) Select Action + Add Physical Device

	Physical Device Name ⇕	Network Address ⇕	Manufacturer/Model ⇕	Color ⇕	Embedded Device ⇕	Location ⇕
☐ ⌄	Ricoh Aficio MP C2800	10.17.77.3	Ricoh 4456-sc	No		1st Floor
☐ ⌄	Xerox WorkCentre 7855	10.17.77.9	Xerox 7855-mmb	Yes	Embedded Device Name	2nd Floor
☐ ⌄	Xerox WorkCentre 7970	10.17.77.1	Xerox 7970	Yes	Embedded Device Name	2nd Floor
☐ ⌄	Another Physical Device	10.17.77.2	Ricoh 4456-sc	No		1st Floor
☐ ⌄	Another Physical Device	10.17.77.4	Xerox 6679-mmb	Yes	Embedded Device Name	2nd Floor
☐ ⌄	Another Physical Device	10.17.77.5	Xerox 7676	Yes	Embedded Device Name	2nd Floor
☐ ⌄	Another Physical Device	10.17.77.6	Ricoh 4456-sc	No		3rd Floor
☐ ⌄	Another Physical Device	10.17.77.7	Xerox 6679-mmb	Yes	Embedded Device Name	3rd Floor
☐ ⌄	Another Physical Device	10.17.77.8	Xerox 7676	Yes	Embedded Device Name	1st Floor
☐ ⌄	Another Physical Device	10.17.78.3	Ricoh 4456-sc	No		2nd Floor

Showing 1 to 10 of 562 Physical Devices   « 1 2 3 4 5 »   Number of items per page 10 ⌄

Tab Navigation - 2nd Level

1. **Second Level Tabs** - a secondary set of tab navigation can be displayed underneath the primary top level tabs (for a selected tab).

   Best practice is to also have these tabs fixed in place, such that if there is a page scroll, then the user can access them for navigation.

2. **Accessing Overflow Tabs** - if there are more tabs than can fit in the screen display, then tabs that are not in view are accessed via a More drop-down.

   If the user selects a tab in the More drop-down then the last tab in the row gets replaced with the drop-down's selected tab. The user can reorder their tabs in view by drag and drop. The state of the secondary level tabs is stored (via cookies) such that when the user opens their browser again to this page, the last session's state/order of the tabs is reflected in the new session.
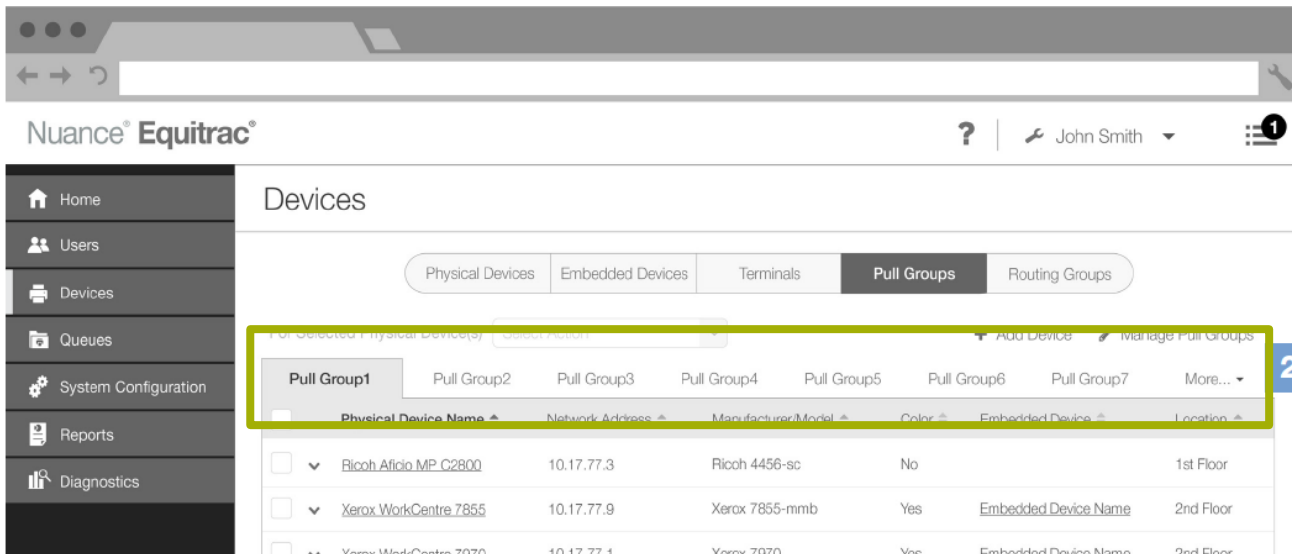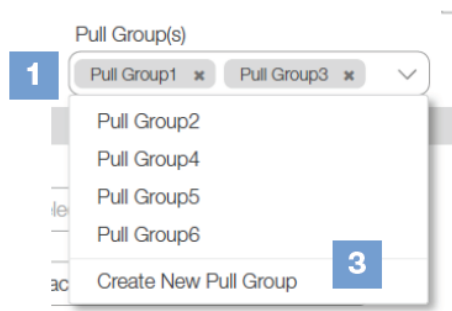
More Controls... (Pattern Guide p 42-48)

- Dropdowns
  - Basic
  - Select action
  - Multi-select

- Buttons
  - Primary
  - Secondary
  - Split-action
  - Radio
  - Toggle

- Checkboxes

Action *	Select	∨

Action *	Select	∨	**1**

Allow this job
Deny this job
Hold this job for release
Force monochrome printing
Send message to the user
Route to a device in group

dition(s)

A number of drop-down type controls are used in the application.

1 **Basic Select Drop-down** - standard "combo box" drop-down control.

2 **"Select Action" Drop-down Button** - selecting an action in the drop-down list enables the user to perform the selected action in a new screen (page or modal window).

For Selected Device(s)	Select Action	∨	**2**

ical Device Name ⬍

+ Control Terminal
+ Embedded Device
+ External Print Queue
+ Nuance Card Reader

Aficio MP C2800

: WorkCentre 7855

✏ Labels
✏ Location
✏ Manufacturer & Model
✏ Port Settings
✏ Price List
✏ Print Driver
✏ Pull Group(s)
✏ Routing Group
✏ Secure Printing
✏ Tracking Behavior
✏ Workstation Routable

WorkCentre 7970

er Physical Device

er Physical Device

er Physical Device

er Physical Device

er Physical Device

er Physical Device

Multi-select Drop-down

Pull Group(s)

1 | Pull Group1 x | Pull Group3 x | ⌄

- Pull Group2
- Pull Group4
- Pull Group5
- Pull Group6
- Create New Pull Group **3**

🏷 Labels ▲ | For Selected Device(s) | Select Action ⌄ | ➕ Add Physical Device ⌄

1 | Select Labels to Display ⌄ | Manage Labels

	Physical Device Name ⇕	Network Address ⇕	Manufacturer/Model ⇕	Color ⇕	Embedded Device ⇕	Location ⇕
☐ ⌄	Ricoh Aficio MP C2800	10.17.77.3	Ricoh 4456-sc	No		1st Floor
☐ ⌄	Xerox WorkCentre 7855	10.17.77.9	Xerox 7855-mmb	Yes	Embedded Device Name	2nd Floor

🏷 Labels ▲ | For Selected Device(s) | Select Action ⌄ | ➕ Add Physical Device ⌄

1 | Label1 x | Label4 x | Label7 x | ⌄ | Clear All | Manage Labels

- Label2
- Label3
- Label5
- Label6
- Label7
- Label9
- Label10

	Location ⇕
	1st Floor
	2nd Floor
	2nd Floor
	1st Floor

🏷 Labels ▲ | For Selected Device(s) | Select Action ⌄ | ➕ Add Ph... **2** ...vice ⌄

Label1 x | Label4 x | Label7 x | ⌄ | Clear All | Manage Labels

	Physical Device Name ⇕	Network Address ⇕	Manufacturer/Model ⇕	Color ⇕	Embedded Device ⇕	Location ⇕
☐ ⌄	Ricoh Aficio MP C2800	10.17.77.3	Ricoh 4456-sc	No		1st Floor
☐ ⌄	Xerox WorkCentre 7855	10.17.77.9	Xerox 7855-mmb	Yes	Embedded Device Name	2nd Floor

Multi-select Drop-down

1 **Multi-select Drop-down** - the multi-select drop-down allows the user to select multiple values that are listed in the drop-down control. Selecting a value from the list results in the value being added to the input area, and the value is no longer displayed in the available value list.

The user can remove a selected value by selecting the value's associated "x".

Note: the drop-down list of available values does not have a set maximum horizontal width; it extends to accommodate the display of values that may exceed the default width (values do not text wrap).

2 **Clear All** - another variation of the multi-select drop-down allows the user to easily clear all their selected values. The Clear All action is not available unless one or more values have been selected.

3 **Create New [Item]** - some multi-select drop-downs provide the ability for the user to initiate the creation of a new value within the drop-down listing. When Create New [Item] is selected, a modal window is displayed where the user creates the new item and upon saving (in the modal window context) the display returns to the initial multi-select drop-down control with the new value inputted.

Primary & Secondary Buttons

Primary & Secondary Buttons

			1		2
	Delete Card Reader		Save		Cancel

Equitrac Express Manager , Version 6.1.12.1234, © 2016 Nuance Communications, Inc., All rights reserved.

Do you want to save your changes?

You have unsaved configuration updates.

1	2
Yes	No Thanks

Form Button Placement Example - Save Model

	3		
	Save	Cancel	

Equitrac Express Manager , Version 6.1.12.1234, © 2016 Nuance Communications, Inc., All rights reserved.

4	Delete Card Reader		Save	Cancel

Equitrac Express Manager , Version 6.1.12.1234, © 2016 Nuance Communications, Inc., All rights reserved.

Primary & Secondary Buttons

Primary & Secondary Buttons

The application uses two level of buttons: primary and secondary buttons.

1   **Primary Buttons** - primary buttons are associated with the primary action for the context. There should only ever be one button on the screen that is primary.

2   **Secondary Buttons** - secondary buttons are used for other available actions on the screen, besides the primary action, that are initiated with a button control. There can be more than one secondary button.

Form Button Placement Example - Save Model

3   **Buttons When Adding a New Object**

4   **Buttons When Editing an Object** - when a Delete or Reset to Default Settings action is available it should not be placed in close proximity to the Save & Cancel buttons.

Also refer to "Page Form Display - Add/Edit" on page 18 and "Form Save Model" on page 54.

Split-Action Button & Links

Split-action Button

Links

Split-action Button

A split-action button acts as two distinct buttons in one. It is used when there is a primary action (displayed) and one or more secondary actions (viewed when selecting the drop-down).

1 **Split-action Button Primary Action** - The user can immediately select the primary action by simply selecting the main portion of the button (New Rule in this example).

2 **Split-action Button Other Actions** - when the arrow is selected it exposes a drop-down list of alternative actions. The user then selects one of these actions.

Links

3 **Links** - links are used (instead of buttons) for lesser actions and when screen layout requires visual hierarchy to be reinforced.
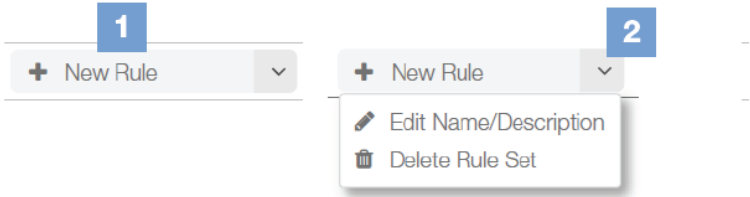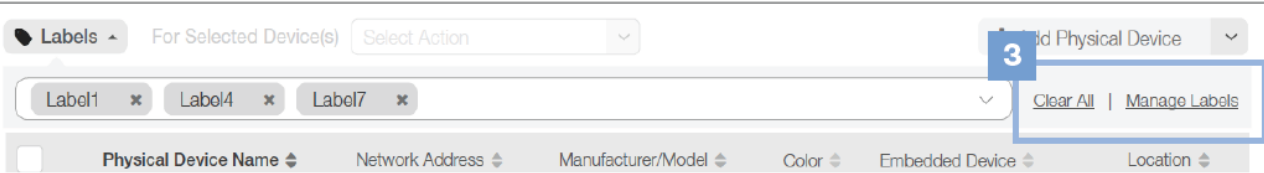
"..." Button `[1]`

Command Line * [   ] [...]

Radio Buttons `[2]`

Release Documents Behavior

⬤ Release documents at assigned control terminal

◯ Release documents from pull group

Toggle Button `[3]`

Cost the job before printing (⬤ on)

Retrieve username from PJL setting (◯ off)

"...", Radio & Toggle Buttons

1 **"..." Button** - selecting this button open the user's operating system file browser so the user can select a specific file

2 **Radio Buttons** - a radio button allows the user to choose only one of a predefined set of options.

Radio buttons are arranged in groups of two or more. Each radio button has an associated label describing the choice that the radio button represents. The choices are mutually exclusive - only one radio button can be selected.

3 **Toggle Button** - a toggle button allows the user to change a setting between an On & Off state.

Checkbox

☑	Serial Number ⇕	Printer IP Address ⇕
☑	430000983	10.17.77.1
☐	430000984	10.17.77.2
☑	430000985	10.17.77.3

Discovered Card Readers - Total: **3**

☑	Serial Number ⇕	Printer IP Address ⇕
☑	430000983	10.17.77.1
☑	430000984	10.17.77.2
☑	430000985	10.17.77.3

1 **Checkbox** - checkboxes are used when more than one option or item can be selected. Checking the box enables/selects the option. Unchecking it, or leaving it unchecked, disables/deselects it.

2 **Select/Deselect All** - If no items have been selected, the user can select all the items in a table or list display by selecting the checkbox in the header area. If one or more items in the listing are selected, then the header checkbox will automatically appear in a "greyed out" semi-selected state to indicate to the user that there are one or more selected items in the listing.

If the header checkbox is selected while in a "greyed out" semi-selected state, then all selected items in the list will be deselected.

Read-only & Disabled Elements

UX Principle:

Make apparent which screen elements the user *cannot* interact with

Fields and controls have states:

- Read-only fields – user can't edit (ever)
- Disabled elements– user can "turn on" to edit

Read-only Field

Name * | Enter Rule Name

Name * | weekend rule

Version   1.1   **1**

Disabled Fields

IP Configuration

Enable DHCP Client ⬤ ON   ℹ

Static IP Configuration   **2**

IP Address   0 . 0 . 0 . 0

Gateway IP   0 . 0 . 0 . 0

Subnet mask   0 . 0 . 0 . 0

DNS Server   0 . 0 . 0 . 0

IP Configuration

Enable DHCP Client ◯ OFF   ℹ

Static IP Configuration   **3**

IP Address   0 . 0 . 0 . 0

Gateway IP   0 . 0 . 0 . 0

Subnet mask   0 . 0 . 0 . 0

DNS Server   0 . 0 . 0 . 0

Package Name   Select Package ▾   **4**

Read-only & Disabled Fields

1 **Read-only Field** - a read-only field is a field value that can be displayed but not modified on the screen.

2 **Disabled Field Controls** - some fields are not editable, but have the potential to be editable dependent on another field value (toggle or drop-down) that is also displayed on the screen.

3 **Toggle Control Disabled Dependency** - In this example having the toggle in the ON (Default) state disables the capability to edit dependent fields. Switching the toggle to OFF enables editing.

4 **Select Drop-down Disabled Dependency** - In this example the second (dependent) drop-down is disabled until a selection is made from the first drop-down.

Disclosure (Pattern Guide p 50-52)

UX Principle:

Reduce screen clutter – don't display what the user doesn't need (right now)

Disclosure:

- Elements on a page/screen are displayed dependent on a user's action

Value Dependency Disclosure

Field Disclosure Based on Radio Button Selection Example

Release Documents Behavior

◉ Release documents at assigned control terminal

1 ◯ Release documents from pull group

Release Documents Behavior

◯ Release documents at assigned Control Terminal ⓘ

1 ◉ Release documents from Pull Group ⓘ

2 Pull Group(s)

[Pull Group1 ✕] [Pull Group3 ✕] ⌄

Pull Group2
Pull Group4
Pull Group5
Pull Group6
Create New Pull Group

Settings

Rule Set   Sele...

Tracking Behavior   Trac...

1 **Field Disclosure** - field(s) can be disclosed/displayed based on a dependency on another field's input value. This can either mean that the dependent field is disabled or not visible until the other field value is altered. In this example the Pull Group drop-down is not visible until the lower radio button is selected.

2 **Visually Reinforce Dependency** - disclosed field(s) should be placed in close proximity and have a visual hierarchy below the field that "drives" the display of the disclosed field(s).

Disclosure Button - Show/Hide Details

Licensed Equitrac Components - Total **10**

1 Show Details ▾

Licensed Equitrac Components - Total **10**

2 Hide Details ▴

Description ⇕	Status/Quantity ⇕	Expires ⇕
Equitrac Component1	Enabled	6/30/2017
Equitrac Component2	500 Users	6/30/2017
Equitrac Component3	100 Devices	6/30/2017
Equitrac Component4	Enabled	6/30/2017
Equitrac Component5	Enabled	6/30/2017
Equitrac Component6	Enabled	6/30/2017
Equitrac Component7	Enabled	6/30/2017

1 **Show Details Button** - When application details are available, but it's not deemed necessary that the user to view them immediately, a Show Details button can be used. When selected, more information/ details are displayed in association with the text that the button is associated with.

The default state is always Show Details (details not displayed). This helps to reduce visual clutter on the screen and allows the user to focus on the most important information.

Note: the arrow associated with the button always points in the direction that the action will result. For example, a down arrow for "expand" (down) to show details, and an up arrow to "collapse" (up) the details.

2 **Hide Details Button** - when the details are visible, the button updates to read "Hide Details". When it is selected the disclosed information will disappear and the button reverts to it's original default state " Show Details".

Disclosure Button - Labels

1 **Labels Disclosure Button - Closed State** - the Labels button (in the Devices View context) is a disclosure button. When initially selected it opens the multi-select labels drop-down filter area below the button.

2 **Labels Disclosure Button - Open State** - selecting the Labels button again will close/hide the label filtering area.

If labels are selected then the Devices view is filtered by the selected labels and the Labels button changes color to indicate to the user that label filtering is applied. The filter(s) applied button state applies to both the open and closed button states.

Selecting labels is performed via a mult-select drop-down control. Also refer to: "Multi-select Drop-down" on page 43.

3. Tables

Tables (Pattern Guide p 73-78)

- Used in a variety of contexts

- Used for listings
  - On Landing pages (Devices, Licenses etc..)
  - "Managing" labels, routing groups, pull groups, rules

- Best practices for tables...

Table Features

1   **Column Headers & Sorting** - the first column of a table has the default sort applied (ascending). The column title to which the sort is applied should have more visual emphasis than the other column titles.

Selecting the sort icon associated with any other column header updates the sort to be applied to that column. Selecting the sort icon of the currently sorted column changes the direction of the applied sort.

Column sorting is optional for table displays.

2   **Field Links** - field links are visually distinguished. In general, a link usually goes to an associated Settings page.

3   **Expanded Row**- by selecting an associated "expand" icon, a row can be expanded so as to display more detailed information.

Expandable rows are optional for table displays. Either all rows should have the expand capability, or no rows should have it.

4   **Scrolling** - the table column headers (and screen area above) should stay fixed on the page so that the user can maintain a view the column headers and any controls positioned above the table. The vertical screen scroll starts below the column headers.

Select/Multi-select Actions

1 **Actions for Selected Item(s)** - the user can select an action to perform on selected item(s) in the table listing. By default, if no items are selected in the table, the Select Action drop-down control and associated label is displayed in a disabled state.

2 **Single-select Action** - once an item/row in the table is selected, the Select Action drop-down control is enabled. Then the user can select to perform any available action, in the drop-down listing, for the selected item.

3 **Multi-select Action** - if multiple items/rows in the table are selected, the Select Action drop-down control is enabled. The user can select to perform an action on the selected items from the drop-down listing.

Note: When selecting multiple items the available actions may be less than when a single item is selected. Only actions that are applicable to *all* selected items should be shown.

4 **Select/Deselect All Checkbox** - the user can select all the items in the table display by selecting the checkbox in the table header. If one or more items in the table are selected, then the checkbox will appear in a "greyed out" selected state to indicate to the user that there are one or more selected items in the table.

If the table header checkbox is selected while in a "greyed out" selected state, then all selected items in the table will be deselected.

Show Filter & Show By

Show	All Terminals ▾	**1**	Selected Terminal(s)	Select Action ▾		🔍 Discover Card Readers ▾

☐		Terminal Name ⇅	Type ⇅	Server ⇅	Description ⇅	Assignment ⇅
☐	⌄	Control Terminal Name	Control Terminal	WAT-IJ-2012R2	Description goes here	Unassigned
☐	⌄	Nuance Card Reader 43000983	Card Reader	DEMO-VM-EE56	Discovered card reader	Xerox WorkCentre 7970
☐	⌄	Nuance Card Reader 43000984	Card Reader	DEMO-VM-EE56	Discovered card reader	Unassigned
☐	⌄	Nuance Card Reader 43000985	Card Reader	DEMO-VM-EE56	Discovered card reader	Unassigned
☐	⌄	Nuance Card Reader 43000987	Card Reader	DEMO-VM-EE56	Discovered card reader	Unassigned

1   **Show Filter** - the table display can be filtered by using a Show drop-down selection to filter the table by a selected field. The default value is Show All.

Note that for Devices, the table display can be filtered by selecting labels to filter the table by.

Refer to "Multi-select Drop-down" on page 43.

2   **Show By** - updating the Show By value pivots the table view, such that the first column in the table (and primary sort) is the selected Show By field.

Show by	System ▾	**2**	Selected System(s)	Select Action ▾		System Search 🔍

☐		System Name ⇅	# of Components ⇅
☐	⌄	WAT-ARUNCHEBIUM	6
☐	⌄	WAT-DMACDONALD2	7
☐	⌄	WAT-EQPRINTSRV	8

Search

1 **Search** - the search has a single field search capability. As the user starts typing inside the search control, the system returns matching field values in the drop-down list which update accordingly as the user continues typing. The user can select a value from the drop-down search criteria.

2 **Search Criteria & Results - Value Selected** - upon selection of a value in the drop-down listing the search is applied. The table display is updated with the associated search results.

3 **Search Criteria & Results - Text Entered** - the user also has the option to hit Enter, or to select the search icon at any point while typing in their search criteria; either of these interactions apply the search string that has been entered in the search criteria.

4 **Clear Search** - the user has the ability to clear their search and return the table display to its non-filtered state. Clear Search only displays when the table is in a filtered state.

Pagination

	Labels ▾	For Selected Device(s)	Select Action ▾			✚ Add Physical Device ▾

☐		Physical Device Name ⇕	Network Address ⇕	Manufacturer/Model ⇕	Color ⇕	Embedded Device ⇕	Location ⇕
☐	⌄	Ricoh Aficio MP C2800	10.17.77.3	Ricoh 4456-sc	No		1st Floor
☐	⌄	Xerox WorkCentre 7855	10.17.77.9	Xerox 7855-mmb	Yes	Embedded Device Name	2nd Floor
☐	⌄	Xerox WorkCentre 7970	10.17.77.1	Xerox 7970	Yes	Embedded Device Name	2nd Floor
☐	⌄	Another Physical Device	10.17.77.2	Ricoh 4456-sc	No		1st Floor
☐	⌄	Another Physical Device	10.17.77.4	Xerox 6679-mmb	Yes	Embedded Device Name	2nd Floor
☐	⌄	Another Physical Device	10.17.77.5	Xerox 7676	Yes	Embedded Device Name	2nd Floor
☐	⌄	Another Physical Device	10.17.77.6	Ricoh 4456-sc	No		3rd Floor
☐	⌄	Another Physical Device	10.17.77.7	Xerox 6679-mmb	Yes	Embedded Device Name	3rd Floor
☐	⌄	Another Physical Device	10.17.77.8	Xerox 7676	Yes	Embedded Device Name	1st Floor
☐	⌄	Another Physical Device	10.17.78.3	Ricoh 4456-sc	No		2nd Floor

1

2

Showing 1 to 10 of 562 Physical Devices   « **1** 2 3 4 5 »   Number of items per page   10 ▾

1   **Pagination** - the table display can be broken into pages if the loading of table results is taxing on the system and results in a poor user experience.

2   **Number of Items per Page** - the user has the ability to select how any items/rows are displayed on each page.

Table Pagination vs Continuous Scroll

- Continuous Scroll – when table rows are loaded as the user scrolls down the table

- Preferable UX – as long as not a significant load delay

- If loading takes takes time (e.g. greater than 1 sec) then use pagination, or could have "load more" action at bottom of table display

Future Considerations

- Right click actions – provides quick easy access to contextual actions (for desktop experience only)

- Filtering – allow user to see a subset of the data

- Printing – user can only "print screen" currently

Devices

Physical Devices | Embedded Devices | Terminals | Custom Views

Showing 1 to 100 of 562 Physical Devices

➤ Export/Print   ▼ Filter   ➕ Add Physical Device

	Name ⌄	Network Address	Manufacturer	Model	Color	Location	Pull Group	Server
⌄ 🖨	Ricoh Aficio MP C2800	10.17.77.3	Ricoh	Ricoh 4456-sc	No	1st Floor		
⌄ 🖨	Xerox WorkCentre 7855	10.17.77.9	Xerox	Xerox 7855-mmb	Yes	2nd Floor		
⌄ 🖨	**Xerox WorkCentre 797**			Xerox 7970	Yes	2nd Floor		
⌄ 🖨	Another Physical Device			Ricoh 4456-sc	No	1st Floor		
⌄ 🖨	Another Physical Device			Xerox 6679-mmb	Yes	2nd Floor		
⌄ 🖨	Another Physical Device			Xerox 7676	Yes	2nd Floor		
⌄ 🖨	Another Physical Device			Ricoh 4456-sc	No	3rd Floor		
⌄ 🖨	Another Physical Device			Xerox 6679-mmb	Yes	3rd Floor		
⌄ 🖨	Another Physical Device	10.17.77.8	Xerox	Xerox 7676	Yes	1st Floor		

Context menu:
- ✏ Edit
- ➕ Control Terminal
- ➕ Embedded Device
- ➕ External Print Queue Device
- ➕ Managed Print Queue
- ➕ Nuance Card Reader
- 🗑 Delete

Table Display Variations (Pattern Guide p 79-85)

- No sorting capability

- Manage Listing

- Rules display and creation

- Single row select – use radio button vs check box

- Show Total display # and number of selected items (for multi-select)

- Icon indicators on rows (for specific items like expired component license, unlinked from default settings)

- Explicit edit button for a row object

- Nested table – multiple levels of expanded rows disclosed

4. Save Models, Validation & Errors

Introduction

- Different ways that the user initiates "Save"

- "Save" or "Apply" Form Pages

- Modal window "Save"

"Save" Form (Pattern Guide p 54)

- "Save" checks field validation and saves the entire object (all setting categories)

- "Save" returns user to previous screen

- "Cancel" or "Back" returns user to previous screen. If data updated, for "Back" display confirmation modal "Do you want to save your changes?"
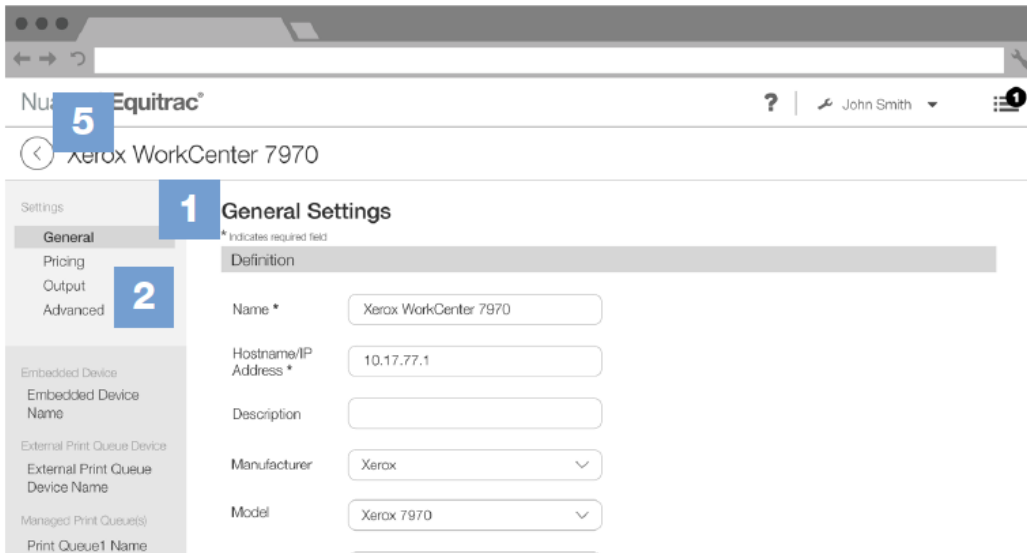
Form Save Model

1   **Saving Form Data** - forms pertaining to object settings can be rendered in the context of a full page display.

2   **Sidebar Navigation** - settings can be categorized into sections that are accessed via the sidebar navigation (settings sectional navigation is optional). The user can navigate between the object's setting sections in the sidebar navigation without being forced to save the settings.

3   **Save Button** - the Save button applies to the entire object settings. For object settings that are separated into navigation sections, all the object's associated setting sections are saved when the user selects Save (not just the section that's currently in view/selected).

If the user is editing a form, the Save button is initially in a disabled state until the user updates any of the existing form data; the Save button then becomes enabled.

Selecting Save saves to the updated form data to the system and returns the user to the page where the form was launched from.

4   **Cancel Button** - cancels the edit session and returns the user to the page where they initiated the edit.

5   **Back Button** - If the user has entered or updated form data, and they select the Back button or navigate elsewhere in the site, a confirmation modal window is displayed asking the user if they want to save their changes.

Refer "Confirmation Modal Windows" on page 64.

Also refer to "Page Form Display - Add/Edit" on page 18 and "Form Button Placement Example - Save Model" on page 44.
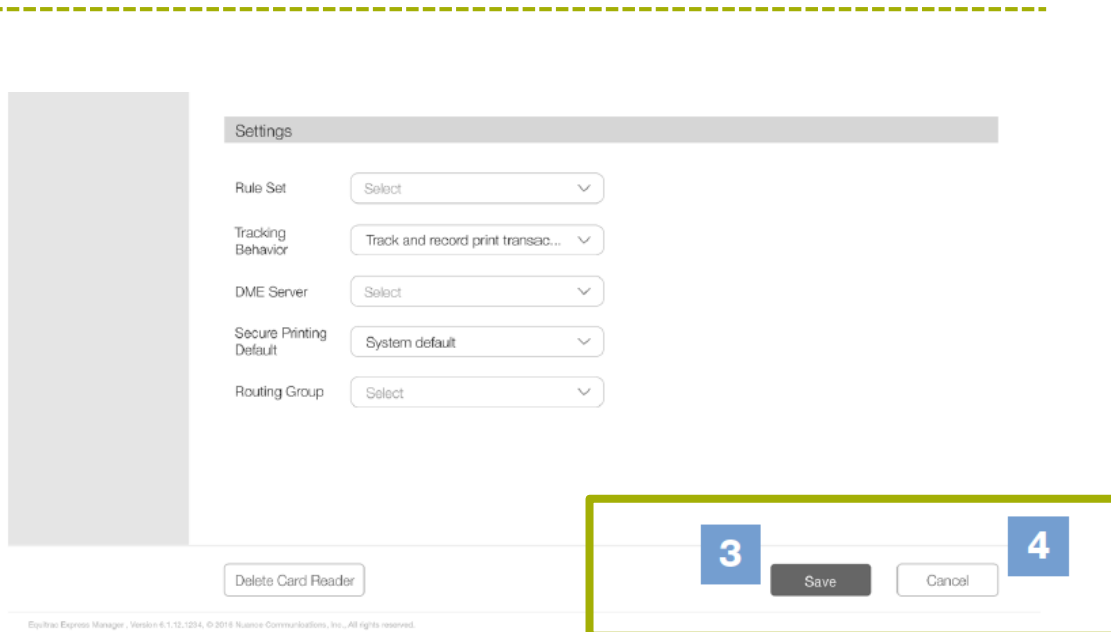
"Apply" Form <small>(Pattern Guide p 55)</small>

- Use Apply model when sidebar navigation is used for "like-type" objects

- "Apply" checks field validation and saves the object

- **"Apply" keeps the user in current screen**

- "Back" returns user to screen that initiated the configuration (of all like-type objects). If data updated, for "Back" display Confirmation Modal "Do you want to save your changes?"

- "Reset to Last Saved Settings" acts as a Cancel
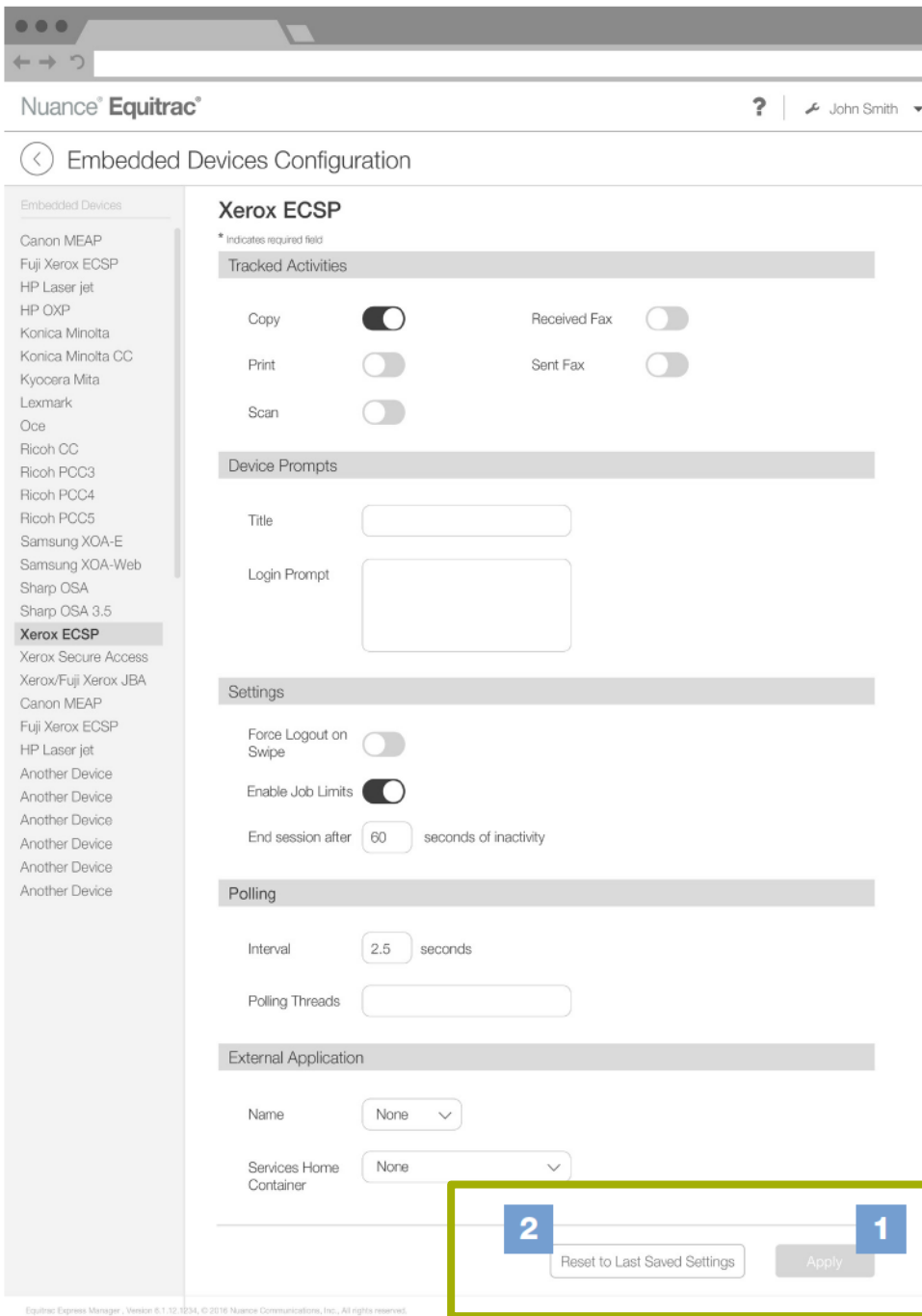
Form Save using the Apply Button

1 **Apply Button** - the Apply button is used to save form data only when sidebar navigation is used to navigate to and display distinct objects (not a single object's setting subsections). Refer to "Sidebar Navigation for "like-type" Objects" on page 12.

Selecting Apply keeps the user in the context of the page. If the save was successful then display a successful save notification toast message. Refer to "Notifications - Alert/Toast" on page 34.

If the user makes any changes to the form, then attempts to navigate to a different item in the sidebar navigation, a modal confirmation window will appear asking the user if they wish to apply the changes. Refer to "Confirmation Modal Windows" on page 64.

2 **Reset to Last Saved Settings Button** - this secondary button is enabled if the user makes any changes to the object's settings. When selected, it reverts the settings displayed on the page back to the "last saved" values.

Also refer to "Form Button Placement Example - Apply Model" on page 44.

Note: there is no Cancel button available when the "Apply" save model is used.

Pages With No Explicit Save (Pattern Guide p 56)

- "Manage Listing" type pages

- Selecting "Add" adds and saves

Labels

Manage your Device Labels below.

Device Labels are used to lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore. magna.

1 Labels: [New Label Name] [Add]

Label1
Label2
Label3
Label4
Label5
Label6
Label7
Label8
Label9
Label10

Pages With No Explicit Save

1 **"Manage" Listings** - Manage listings do not have an explicit Save button.

When the user adds an item to the list, then the listing is immediately updated when the Add button is selected (as long as there is no error associated with the new input).

Editing an object is done in a modal window, and the parent table listing is updated when the user selects Save in the modal window context.

Deleting an item brings up a confirmation modal window. When the user selects Yes in the confirmation modal window the listing is updated with the deletion removed.

Also refer the page type "Manage" Listing on page 79.

Error Handling Best Practices

- Prevent errors (ahead of time) if possible
  - Client side validation. Prevent user from selecting Save if there's an error
  - Hint/show field entry format

- If there's an error, make easy to recover
  - Tell the user exactly what the problem is (informative messages)
  - Make field in error easy to find

Field Validation & Error Display

- Client side validation for required fields – indicate to user as they enter info that they've missed a required field

- Save or Apply button disabled until all required fields entered (or fields in error fixed)

- Error Notification displayed at top of screen (fixed in place)

- Error indicators on page and in sidebar nav to tell user where errors are
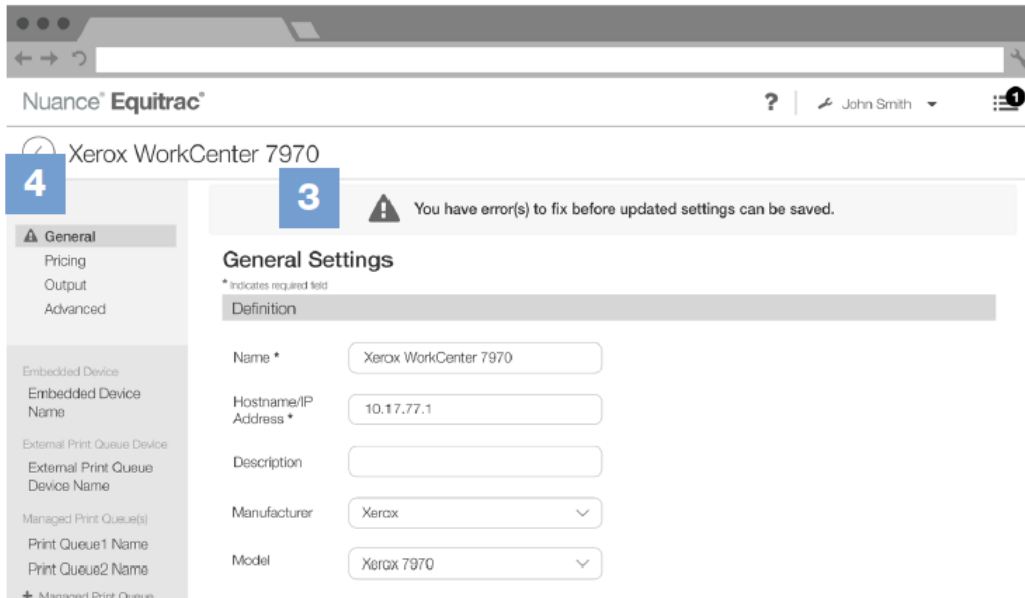
Form Field Validation & Error Handling

1 **Field Errors** - field validation is performed both in real-time (for client-side validation like checking if required fields are entered), and server-side validation (performed when user selects Save or Apply).

Fields that are in error - are highlighted and an associated error message is displayed.

This method of displaying field errors is used in all contexts - for page forms and modal window field displays.

2 For client-side validation, such as required fields, a field error is displayed in real-time, for any required fields that have been "skipped" by the user in the form field filling sequence order, or have been entered but do not meet field validation requirements.

In this wireframe scenario, the user has the Rule Set field in focus, but skipped over selecting the Pull Groups required field.

3 **Error Alert Message** - upon selecting Save, page forms also display an error alert message at the top of the page if there are errors.

4 **Sidebar Navigation Section Error Indicator** - for Settings that have navigational sections, selecting Save checks for errors for all the se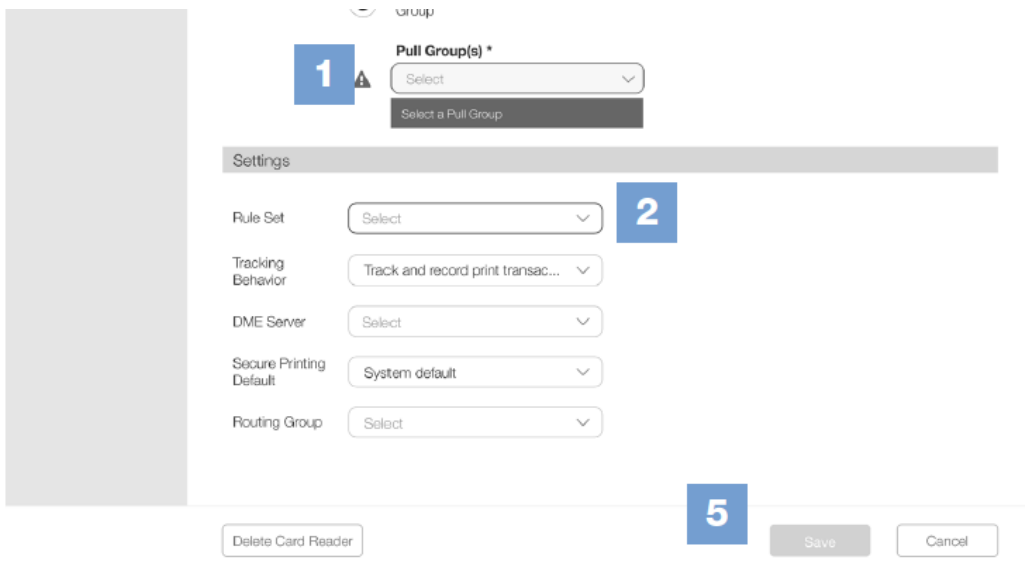ctions. If there is a section that has fields in error, the section name in the sidebar navigation has an error icon associated with it (the error icon is displayed until all errors in the section are fixed).

4 **Disabled Save Button** - the Save button is disabled until all the form field errors are fixed (for all sections).

Nuance® Equitrac®

? | John Smith

Xerox WorkCenter 7970

3 ⚠ You have error(s) to fix before updated settings can be saved.

4
- ⚠ General
- Pricing
- Output
- Advanced

Embedded Device
- Embedded Device Name

External Print Queue Device
- External Print Queue Device Name

Managed Print Queue(s)
- Print Queue1 Name
- Print Queue2 Name
- ✦ Managed Print Queue

General Settings

* Indicates required field

Definition

Field	Value
Name *	Xerox WorkCenter 7970
Hostname/IP Address *	10.17.77.1
Description	
Manufacturer	Xerox
Model	Xerox 7970

Group

1 ⚠ **Pull Group(s) ***
Select
Select a Pull Group

Settings

2
Field	Value
Rule Set	Select
Tracking Behavior	Track and record print transac...
DME Server	Select
Secure Printing Default	System default
Routing Group	Select

Delete Card Reader

5 Save | Cancel

Equitrac Express Manager . Version 8.1.12.1334. © 2010 Nuance Communications, Inc., All rights reserved.

Form Field Validation & Error Handling Cont...

1 **Error Alert Message** - for Settings that have navigational sections, the error alert message remains displayed until all errors are fixed.

2 **Example of Errors in Multiple Setting Sections**
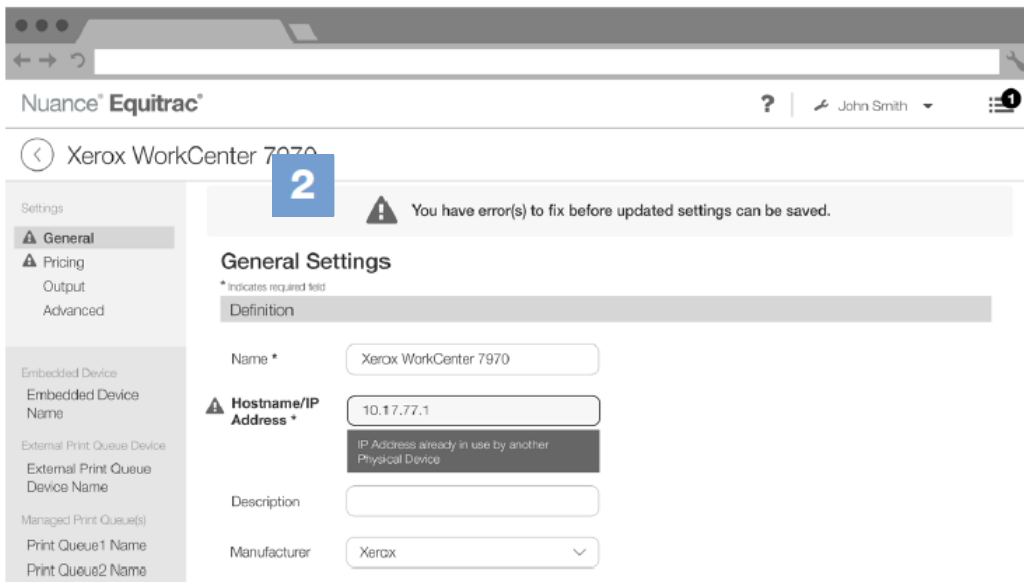
Other Option Explored....

- Display specific field errors
- Link directly to field in error
- Indicate with check when fixed

Modal Window Saving, Field Validation & Error Handling

Add Printer/Driver

`1`

Model Name	Select Model ⌄
Environment	Select Environment ⌄
OS Version	Select OS ⌄
Package Name	Select Package ⌄ ⓘ
Driver Name	Select Driver ⌄

Save   Cancel

1 **Modal Window Save Model** - the patterns for saving, field validation and error handling for form fields displayed in a modal window context are the same as for when fields are displayed in a page view.

The only exception is that there is no error alert message displayed at the top of the screen.

Synopsis:

- Save button is not enabled until all required fields are inputted.

- Client-side and server-side error validation performed.

- Fields in error have visual treatment with field level error message.

5. Modal Windows

What is a Modal Window?

"…a graphical control element subordinate to an application's main window.

It creates a mode that disables the main window, but keeps it visible with the modal window as a child window in front of it.

Users must interact with the modal window before they can return to the parent application."

(*Wikipedia reference*)

When to use…(Pattern Guide p 62-67)

- Confirmations
- What would you like to do next…?
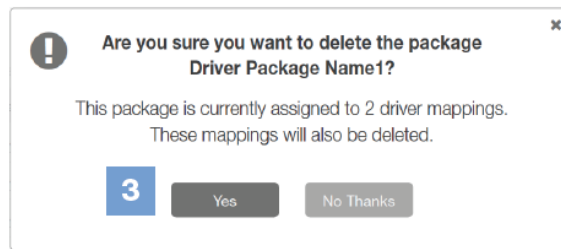- Object Properties (with minimal fields)

Best Practice:

Really really try hard not to have "modal on top of modal" scenarios

Don't want to take the user too far away from initial starting point

Confirmation Modal Windows
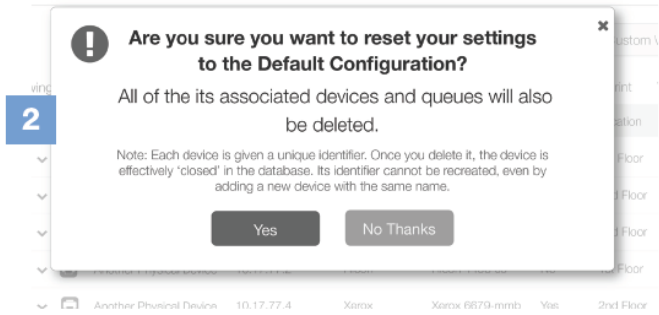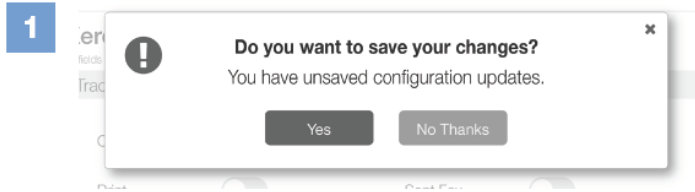
Confirmation Modal Windows

1 **Confirmation Dialogs** - modal windows are used to display confirmations of a previous action to ensure the user wants this action to be performed. Sometimes the modal will provide an alert for important actions that require a confirmation before finalizing. Sometimes the modal will ask the user to perform an action that was previously not initiated. (e.g. Save)

2 **Levels of Text** - There can be up to three levels of text.

The first sentence/header asks a question to the user relating to the previous action to be confirmed.

The second sentence or phrase is optional and outlines potential impact(s) of the action.

If needed, a third level of explanatory text can be displayed to give further information.

3 **Yes vs No Thanks** - responding "Yes" proceeds with the action stated in the question. Actions that result in an item update, add new, delete, import, displays an Alert/Toast notification of the ensuing action.

Refer to "Notifications - Alert/Toast" on page 34.

"No Thanks" cancels the action and returns the user to the application's parent screen.

"What would you like to do next?" Modal Windows

4 **"What would you like to do next?"** modal windows are also used to display messaging that a desired action is not possible, and asking the user what they would like to do.

"What would you like to do next?" Modal Windows
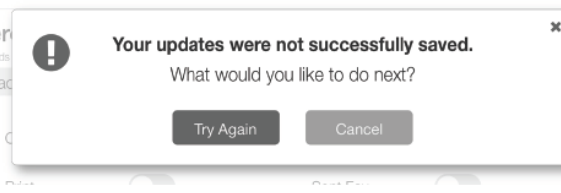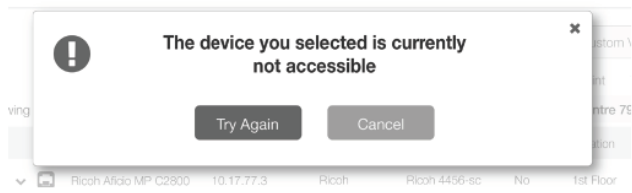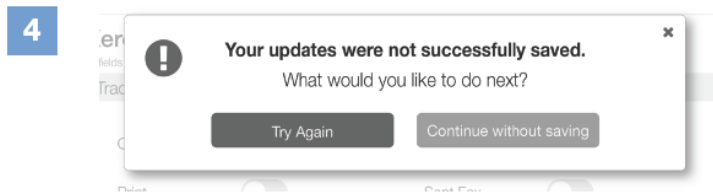
Properties (Add/Edit) Modal Windows

1 **Object Properties Modal Windows** - modal windows are used to add or edit object properties when there are not many property fields to display.

If the modal window vertical height exceeds 600 px, with the stacked field layout (including space for error message below fields that can have errors), then do not use a modal window to display object properties, use a page layout instead.

2 **Save Button** - When editing properties, the Save button is initially disabled when the modal window is displayed. When the user updates a field, the Save button is enabled.

When adding a new object, the Save button is disabled when the modal window is initially displayed. It is enabled when all required property fields are entered.

---

1 Edit Printer/Driver ✕

Model Name | WorkCentre 7855 ⌄

Environment | x64 ⌄

OS Version | Windows 7 ⌄

Package Name | Xerox7855PCL6-Win-64-bit ⌄ ⓘ

Driver Name | Xerox WorkCentre 7855 PCL6 ⌄

2 [Save] [Cancel]

---

1 Rule Set Properties ✕

Rule Set Name | Rule Set1

Description | This is Rule Set1 Description

[Save] [Cancel]

6. Stepped Workflow

When to use…(Pattern Guide p 68-72)

- Action requires multiple modal windows – a process with each step in a new modal window
- Like a "wizard" (if multiple steps)

Condition(s)   Add Condition   **1**

Add Rule Condition   **2**   ✕

User Conditions
- ○ User is in a specified group
- ○ User is in a specified department

Other Conditions
- ● The day of the week is as specified
- ○ The time of day is in a specified range

Job Conditions
- ○ The job has less than a specified number of pages
- ○ The job has more than a specified number of pages
- ○ The job has more than a specified number of color pages
- ○ The job has less than a specified number of KB
- ○ The job has more than a specified number of KB
- ○ The job has one or more color pages
- ○ The job has no color pages
- ○ The job has one or more duplex pages
- ○ The job has no duplex pages
- ○ The job title matches specified string

Next ❯   Cancel

Select Day(s) of the Week   ✕

The day of the week is as specified...

3
- ☐ Monday
- ☐ Tuesday
- ☐ Wednesday
- ☐ Thursday
- ☐ Friday
- ☑ Saturday
- ☑ Sunday

← Back   Add Condition   Cancel

Condition(s)   The day of the week is as specified   ✏ 🗑

Add Condition   **4**

When the day of the week is: <u>Saturday, Sunday</u>

1 **Initiation** - in this scenario, a 2 step process is initiated by selecting a button (in the context of an add/edit page) that allows the user to add a condition to a rule.

2 **Step 1** - A modal window opens where the user selects their first criteria (condition type).

Buttons in the first step's window are Next and Cancel (no Back). The Next button is disabled until required fields are entered (a single selection in this case).

Selecting Next takes the user to the next step in the workflow. Cancel, closes the window and returns the user to the page where the workflow was launched.

3 **Step 2 (final step)** - in this scenario, the information displayed in the second step is dependent on the user's input in the first step; however, there does not have to be any dependency between steps (besides step1 must be completed before step2).

Buttons in this next (and final) step's window are Back (takes the user back to step1), Add Condition (the final action/result of the workflow), and Cancel.

The Add Condition button is disabled until required fields are entered (at least one selection in this case).

4 **Stepped Workflow Result** - selecting Add Condition closes the modal window and returns the user to the page where the workflow was launched, with the new Condition added.

69

License Manager

1 How do you want to manage your License? ⊗ ⑦

○ **Update & reactivate License**

○ Deactivate & uninstall License

Next >

Install & Activate New License

2 Install & Activate License ⑦ **3** ⊗

Select below to either install and activate the License automatically (internet connection required), or to install the License file manually (no internet connection necessary).

● **Install & Activate License Automatically**
Internet connection required

License Key `7303-0372-8285-9854`

○ Install License Manually
No internet connection required
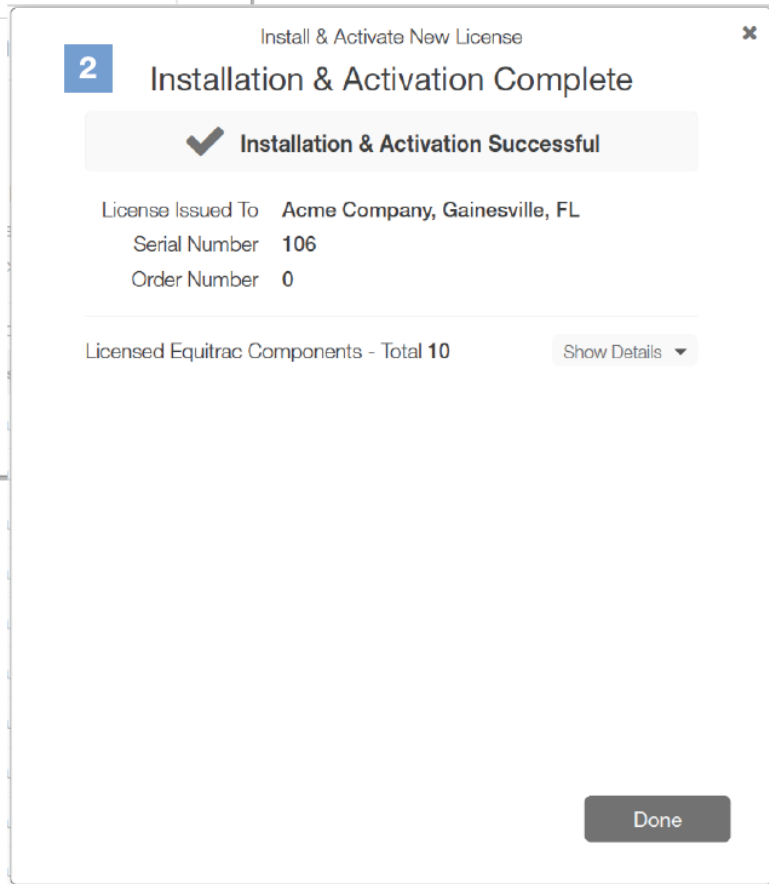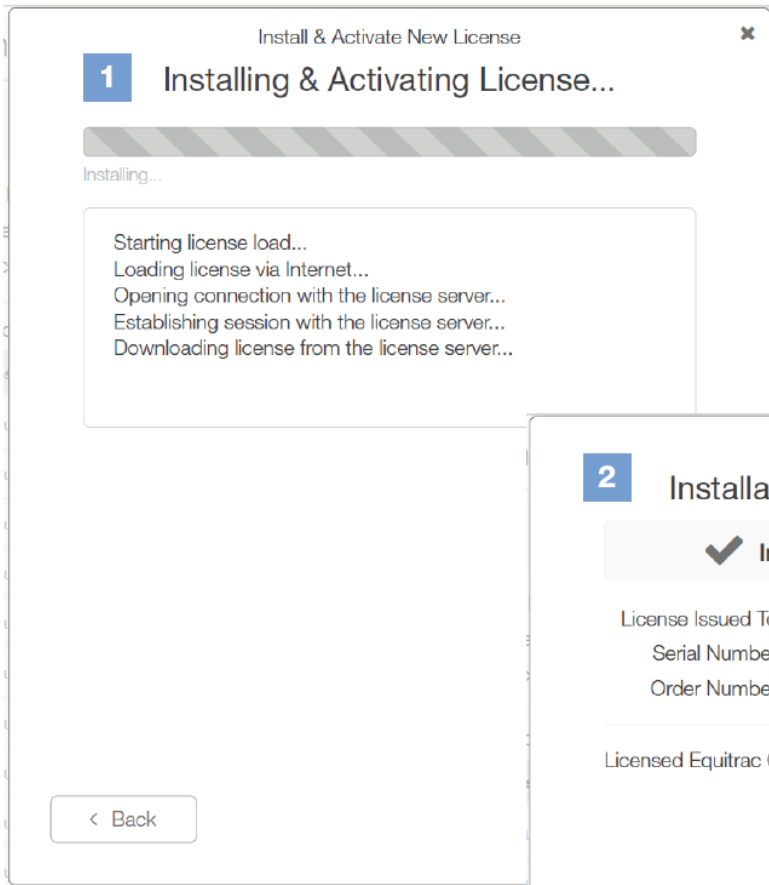
Next >   Cancel

Stepped Workflow - Wizard

1 **Initiation** - a stepped workflow can be directly initiated by selecting a button or by launching an introductory "gateway" modal window which, based on the user's selection, will determine the ensuing steps to display in the workflow.

2 **Step 1** - can be initiated directly from a page or launched from a prior "gateway" window (include a Back button if launched from "gateway").

Other buttons in the first step's window are Next and Cancel.   The Next button is disabled until required fields are entered.

Selecting Next takes the user to the next step in the workflow. Cancel, closes the window and returns the user to the page where the workflow (or "gateway") was launched.

3 **Help** - access to help with either the workflow process or contextual window content is accessed within the modal experience. The Help that is in the site header is not accessible in a modal experience. Help content should be presented in a different browser session or window so the user does not lose where they are at in the application.

Install & Activate New License

1 Installing & Activating License...

Installing...

Starting license load...
Loading license via Internet...
Opening connection with the license server...
Establishing session with the license server...
Downloading license from the license server...

‹ Back

Install & Activate New License

2 Installation & Activation Complete

✔ **Installation & Activation Successful**

License Issued To   Acme Company, Gainesville, FL
Serial Number   106
Order Number   0

Licensed Equitrac Components - Total **10**   Show Details ▾

Done

Stepped Workflow - Wizard Cont...

1 **Processing Step** - if a step in the workflow reflects a processing state, then the Next button is not displayed until after the processing is complete. The user can select Back or Cancel.

2 **Final Step** - the results of the stepped workflow in this example are contained in the workflow and reflected in the final step.

The final step's only button in this scenario is Done, which upon selection closes the modal window and returns the user to the page where the workflow was launched.

Install & Activate New License

1 **Activate License**   ?

⊘ **License Registration Required**

Your License needs to be registered prior to activation. To register your License go to www.nuancexxxx.com.

After registering your License online, return to this screen and select "Retry Activation".

You can activate your License later (not recommended) by selecting "Skip" below.

‹ Back   Retry Activation ›   Skip

Activate License later

Stepped Workflow - Wizard Cont...

1 **Skip Step** - depending on the workflow, sometimes a step is not required. In this case, Skip can be a button option.

Best practices

- Access to Help
- Main title, and step in workflow title
- No "Back" button on first page
- If step is optional, allow user to skip step

Today's Recap

- Information & Text (communicating to the user)
- Controls & Widgets (components that make up a page)
- Tables
- Save Models, Validation & Errors
- Modal Windows
- Stepped Workflow

UX Training Sessions Are Posted

training.authenticInsight.com

Sign up!

Next Session

Session3:

Foundations of UX/ Information Architecture deep dive

July 6, 2017