

Functional Requirements Document -

DIG-ITS



Table of Contents

- 1. Purpose
- 2. Project Overview
 - 2.1 Objective
 - 2.2 Scope
 - 2.3 Out of Scope
 - 2.4 Assumptions
- 3. Functional Modules
 - 3.1 Menu Structure
 - 3.2 Design Patterns
 - 3.3 General UI Guidelines
- 4. Screens
- 4.1 Job Scheduler
- 4.1.1 Job Detail Page
 - 4.1.1.1 Support Instructions
- 4.1.1.2 Job Plans
- 4.1.1.3 Run Statistics
- 4.1.1.4 Incidents
- 4.1.1.4.1 Incident Details Popup
- 4.1.1.5 Change Request
- 4.1.2 Job Plan Detail Page
 - 4.1.2.1 Jobs
 - 4.1.2.2 Run Statistics
 - 4.1.2.4 Incidents
 - 4.1.2.4.1 Incident Details Popup
 - 4.1.2.5 Change Request
- 5. Non-Functional Requirements
- 6. User Roles and Permissions
- 7. Dependencies
- 8. Reporting Requirements
- 9. ERD & Data Model





1. PURPOSE

The purpose of this document is to define the functional and non-functional requirements for the DIG-ITS application. This system aims to unify operational visibility and support workflows by integrating various platforms like UC4, ServiceNow and Informatica under a single frontend. DIG-ITS will enhance efficiency, improve turnaround times, and provide a centralized repository for operational data, logs, incidents, and change requests.

This FRD serves as the foundation for the development, testing, and deployment of DIG-ITS, ensuring all stakeholders have a shared understanding of its functionalities and objectives.





2. PROJECT OVERVIEW

2.1 OBJECTIVE

To develop a Java-based web application that provides end-to-end operational visibility and job support functionality by integrating disparate systems (UC4, ServiceNow and Informatica) into a unified platform for Great American Insurance Group (GAIG).

2.2 SCOPE

- Development of a secure, role-based web application.
- Integration with external platforms to pull job data, incidents, change requests, and run statistics.
- User-friendly dashboards and reporting mechanisms using embedded Power BI.
- Centralized support documentation repository.

2.3 OUT OF SCOPE

- Bi-directional updates to external systems.
- Mobile app development.
- Infrastructure provisioning and CI/CD setup.
- Production deployments.

2.4 ASSUMPTIONS

• External system integrations will provide necessary APIs and data access.





3. FUNCTIONAL MODULES

3.1 MENU STRUCTURE

Menu Item	Submenus/Features	
Home	Search Job, Subject Area List, Recent Incidents, Change Requests	
Dashboard	System health overview, alerts, and key metrics	
Job Scheduler	View all jobs with filters, sorting, and search	
Change Requests	List, view, and manage change requests	
Incidents	View incidents and tickets from ServiceNow	
Reports	Embedded Power BI reports	
Admin	User Management, Role Management, Report Management, Support	
	Templates	

3.2 DESIGN PATTERNS

- Collapsible sidebar with icons and labels.
- Highlight active menu items.
- Role-based visibility (e.g., only Admins see Settings).

3.3 GENERAL UI GUIDELINES

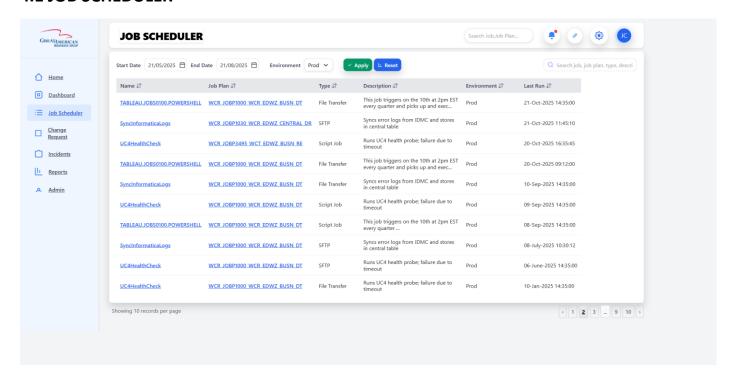
- Uniform button width across pages
- Center-aligned text in all buttons
- Avoid excessive scrolling
- Use consistent layout (follow Incident Page layout as template)





4. SCREENS

4.1 JOB SCHEDULER



I. PURPOSE

The **Job Scheduler** screen provides a user interface to view and monitor the execution of scheduled jobs within the UC4 automation system. It allows users to filter, search, sort, and navigate through job details, as well as access individual job and job plan pages for deeper insight.

II. SCOPE

This screen is primarily designed for operations and support users. It includes job listing functionality with filtering, sorting, hyperlinking, and pagination. It supports only viewing operations, and no job creation or execution is handled on this screen.

III. FUNCTIONAL OVERVIEW

A. Navigation and Layout

- Accessible from the left navigation menu under "Job Scheduler".
- Includes a filter bar, search bar, and job listing table.
- Page header displays the title: Job Scheduler.

bitwise

IV. FUNCTIONAL REQUIREMENTS

A. Filter Bar Functionality

i. Date Range Picker

- Includes Start Date and End Date fields.
- Default behavior on page load:
 - Start Date = Today 30 days
 - o End Date = Today
- Filters are **auto-applied** with default values on page load.

ii. Environment Dropdown

- Dropdown labeled "Environment" with options:
 - o dev
 - o cert
 - prod (default selection)
- Filters are **auto-applied** on load with the default environment.

iii. Apply and Reset Buttons

- Apply button applies current filter and search criteria.
- Reset button resets all filters to default (Prod, Last 30 Days).

B. Search Functionality

i. Global Search Bar

- Search input placed at the top right of the filter bar.
- Searches across:
 - o Job Name
 - o Job Plan

ii. Job List Search

- Works on all visible columns except "Last Run".
- Allows inline filtering of job list.

C. Job Listing Table

i. Pagination

- Default: 10 records per page.
- Navigation controls allow movement between pages.





ii. Sorting

- Sorting enabled on all columns.
- Default sort: Last Run in descending order.

iii. Columns Displayed

Following five columns are shown:

Column Name	Description	
Job Name	Name of the job. Hyperlinked to open the Job Page.	
Job Plan	Associated job plan name. Hyperlinked to open the Job Plan Page.	
Job Type	Type of job.	
Description	Summary of what the job does. Limited to 2 lines with ellipsis () if overflow occurs. Word wrapping enabled.	
Environment	Displays the job environment (dev/cert/prod).	
Last Run	Timestamp of last execution. Sorted descending by default.	

iv. Data Uniqueness

• The job list should present **unique records** based on the combination of **Job Name** and **Job Plan**.

V. HYPERLINK BEHAVIOR

- Job Name: Opens the corresponding Job Detail Page.
- Job Plan: Opens the corresponding Job Plan Detail Page.

VI. UI/UX REQUIREMENTS

- Description field must be wrapped and **truncated after two lines** with **ellipsis** (...) for overflow.
- Responsive layout must be supported for various screen sizes.
- Consistent styling with the overall application theme (buttons, fonts, colors, etc.).

VII. NON-FUNCTIONAL REQUIREMENTS

- Backend filtering should be optimized for performance to handle large job datasets.
- API queries (if any) must support filter, sort, and pagination parameters.
- Security and access control must ensure only authorized users can view job data.





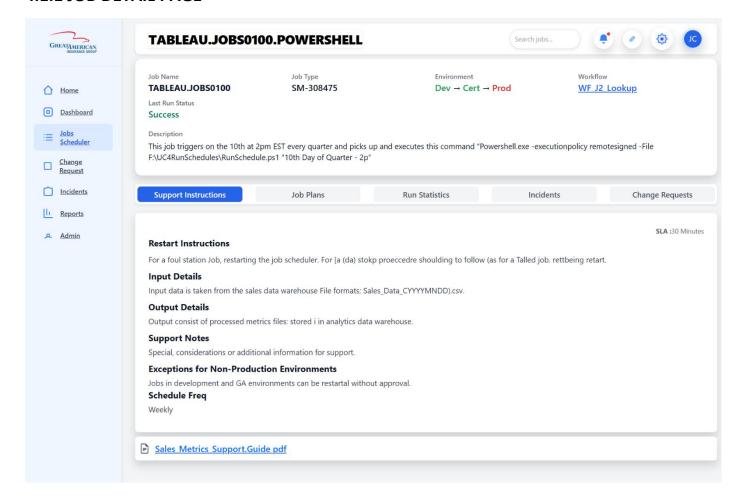
VIII. OUT OF SCOPE (FUTURE ENHANCEMENTS)

- Export functionality (CSV, Excel).
- Real-time job monitoring and live status updates.
- Job execution or modification from the UI.





4.1.1 JOB DETAIL PAGE



I. PURPOSE

The **Job Detail Page** provides an in-depth view of an individual job. It is accessible by clicking the **Job Name hyperlink** on the Job Scheduler screen. This page allows users to view metadata about the job, monitor its performance, review past execution data, troubleshoot issues, and track changes made to the job.

II. NAVIGATION

- Accessible from: Job Scheduler → [Click on Job Name]
- Opens the **Job Detail Page** for the selected job.
- Default tab on load: Support Instructions Tab





III. PAGE LAYOUT

A. Header Section

The header contains the **full technical job name** as the page title (e.g., TABLEAU.JOBS0100.POWERSHELL).

B. Job Metadata Section

This section displays structured job details:

Field	Description	
Job Name	Friendly display name of the job (e.g., Sales Metrics Processing)	
Job Type	UC4 Job ID or identifier (e.g., SM-308475)	
Environment	Available environments listed: Dev, QA, Prod (shown as toggles or labels)	
Workflow	Textual field currently. Hyperlinked field pointing to the associated workflow	
	page on UC4 (if API is provided).	
Last Run Status	Status of the most recent job execution (e.g., Success, Fail)	

IV. DESCRIPTION SECTION

- Text area summarizing the job's functionality and behavior.
- Describes schedule details and the command being executed.
- Long descriptions should support word-wrapping and line breaks.

V. TABS SECTION

Available Tabs (Horizontal Menu)

Tab Name	Functionality Overview	
Support Instructions	Displays restart steps, SLA details, inputs/outputs. (Default tab)	
Job Plans	Lists associated job plans, dependencies, or higher-level groupings	
Run Stats	Displays job execution statistics over time	
Incidents	Shows related incident records and status	
Change Request	Tracks changes to the job configuration	

Tab navigation must not reload the page but instead update the content area dynamically.





VI. FUNCTIONAL REQUIREMENTS

A. Default Tab Load

• On initial load, the **Support Instructions** tab must be selected and displayed by default.

B. Dynamic Content Loading

- Each tab must load only its specific data when selected.
- No full page reload on tab switch.

C. Hyperlink Behavior

- **Workflow Field**: The workflow field should open the associated workflow page in the same tab (if the ServiceNow API is available; otherwise, this feature is out of scope).
- **Documents**: Any documents listed (e.g., Sales Metric Support Guide.pdf) should **open in a new browser tab** when clicked. **Note**: The behavior for opening documents in a new tab is still under discussion and may be subject to change based on further requirements or technical constraints.

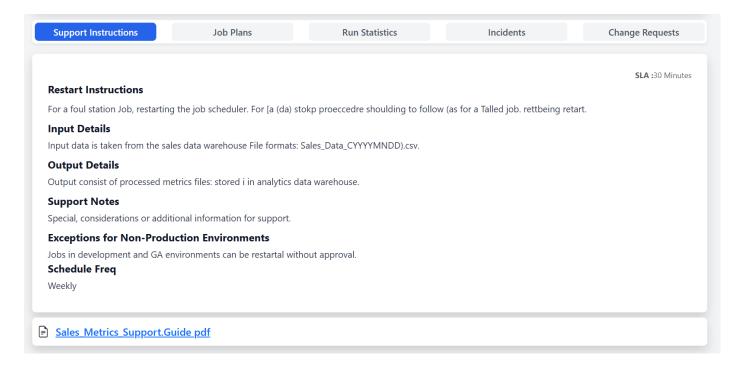
VII. UI/UX REQUIREMENTS

- Clean, card-based layout for metadata and descriptions.
- Environment labels (Dev, QA, Prod) should be visually distinctive (e.g., color-coded based on if the job has been executed on the environment or not).
- Word wrapping must be applied to long descriptions and instructions.
- The layout should be responsive and display cleanly across desktops.





4.1.1.1 SUPPORT INSTRUCTIONS TAB



I. PURPOSE

The **Support Instructions** tab provides comprehensive operational guidance for executing, monitoring, and troubleshooting a job. This includes restart procedures, SLA information, data input/output details, and environment-specific exceptions.

It ensures that support teams have all necessary information to manage job execution effectively, particularly during incidents or failures.

II. ACCESS AND DEFAULT BEHAVIOR

- This tab is part of the Job Detail Page (4.1.1).
- Automatically selected and loaded by default when a job detail page is accessed.
- Displays job-specific support information in a structured, readable format.

III. LAYOUT AND CONTENT SECTIONS

The tab is visually split into well-defined blocks. Each section is formatted using headers and paragraph content.

A. SLA (Max Run Time)

- Displayed in the **top-right corner**.
- Text format: SLA: Value from database





• Aligns horizontally with the section header for visual prominence.

B. Restart Instructions

- Title: Restart Instructions
- Describes manual or automated steps needed to restart the job if it fails.
- Displayed as a multi-line paragraph.
- Supports readable formatting (word-wrapped and spaced).

C. Input Details

- Title: Input Details
- Describes the source of data, including file names, formats, and origins.
- Can include bullet points or comma-separated formats.

D. Output Details

- Title: Output Details
- Describes what **output** the job generates (files, reports, database updates, etc.).
- May include locations or destinations.

E. Support Notes

- Title: Support Notes
- Any special instructions, additional guidelines, or reminders.
- Used for highlighting manual validations, upstream/downstream dependencies, etc.

F. Exceptions for Non-Production Environments

- Title: Exceptions for Non-Production Environments
- Explains environment-specific instructions, such as **bypassing approval workflows** or simplified restart steps.

G. Schedule Frequency

- Title: Schedule Frequency
- Describes the frequency at which the job is scheduled to run. E.g. Weekly, Monthly, Ad-hoc
- Should be displayed as a simple text.

H. Linked Support Document

- Label: Sales Metrics Support Guide.pdf
- Hyperlinked text at the bottom of the tab.
- On click:
 - Opens the document in a new browser tab.
 - No download icon is shown.
- Link should be validated (file must exist and be accessible to authorized users).





Note: The behavior of hyperlinking and opening documents in a new tab is still under discussion and may be subject to change based on further requirements or technical constraints.

IV. FUNCTIONAL REQUIREMENTS SUMMARY

Feature	Specification
Default Tab	Support Instructions shown by default on Job Detail Page load
SLA Display	Top-right aligned
Restart Instructions	Multi-line paragraph; shows job recovery steps
Input Details	File sources, formats, or dependencies listed clearly
Output Details	Output targets (e.g., files, DB updates)
Support Notes	Optional guidelines or caveats for support teams
Exceptions for Non-Prod	Shows simplified restart policies or notes for QA/Dev environments
PDF Link	Opens in new tab; no download icon
Word Wrapping	Enabled on all content for readability
Responsive Layout	All sections should align cleanly on desktop

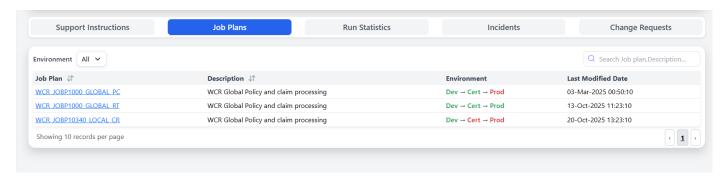
V. NON-FUNCTIONAL REQUIREMENTS

- Must support secured access to linked documents (PDFs).
- The document link should **fail gracefully** if missing (e.g., show "file not available").
- The layout must be keyboard and screen-reader accessible.





4.1.1.2 JOB PLANS TAB



I. PURPOSE

The **Job Plan Tab** displays a list of job plans that are available for viewing. It provides users with an overview of job plan details, such as job plan names, descriptions, environments, and modification dates. The tab allows users to filter, sort, and access further details of each job plan through dynamic interaction. The user can click on any specific job plan to view its detailed information on a separate page.

II. NAVIGATION

- Accessible from:
 - Job Scheduler → [Click on Job Plans Tab]
- Opens:
 - The list of job plans is displayed in a table format with associated metadata.
- Tab Visibility:

This tab is part of the horizontal tab navigation in the Job Detail Page (4.1.1).

III. PAGE LAYOUT

The **Job Plan Tab** is organized into a table format, displaying the following metadata columns for each job plan. The layout should be clean, responsive, and visually structured for easy scanning of job plan data.

A. Header Section

Tabs Navigation:

Horizontal tabs at the top, including:

- Support Instructions (Default tab)
- Job Plans (Selected tab)
- Run Statistics
- Incidents
- Change Requests
- Search Field:

A search bar should be available at the top-right corner of the Job Plan table to allow users to search job plans by **Job Plan Name**, **Description**, or **Environment**.



B. Job Plan Table

The table will display the following columns:

1. Job Plan

- a. The name of the job plan (e.g., WCR JOBP1000 GLOBAL PC).
- b. The name should be a clickable hyperlink that directs users to the job plan's detailed page.

2. Description

a. A short description of the job plan (e.g., WCR Global Policy and claim processing).

3. Environment

- a. A list of the environments associated with the job plan, displayed with color codes.
 - i. **Green**: Successfully executed.
 - ii. Red: Pending or in progress.

4. Last Modified Date

- a. The date and time when the job plan was last modified (e.g., 03-Mar-2025 00:50:10).
- b. The date should be displayed in a readable, formatted way and should be sortable by clicking the column header.

5. Pagination

- a. The table should support pagination to display a limited number of job plans per page (e.g., 10 records per page).
- b. Users should be able to navigate between pages using page numbers or previous/next buttons.

C. Environment Filter

A filter dropdown should be provided to allow users to filter job plans based on the environment (e.g., **All**, **Dev**, **Cert**, **Prod**). This should dynamically update the displayed list based on the selected environment.

IV. FUNCTIONAL REQUIREMENTS

A. Dynamic Content Loading

- The job plans list must dynamically load based on the selected filters and search criteria.
- Changing filters or search criteria must update the job plan list without reloading the entire page.

B. Sorting

- Each column in the job plan table (Job Plan, Description, Environment, Last Modified Date) should be sortable by clicking on the column header.
- Sorting should be both ascending and descending.



C. Hyperlink Behavior

- Clicking on the job plan name (under the "Job Plan" column) should open the **Job Plan Detail**Page in the same window/tab.
- The job plan name should be a hyperlink, clearly distinguishable by a different style (e.g., underline or color).

D. Search Functionality

- Users should be able to search job plans by name, description, or environment using the search bar at the top-right.
- The search should be case-insensitive and support partial text matches.

E. Environment Status Display

- The **Environment** column will display color-coded status indicators:
 - o **Green**: Successful execution in the environment.
 - Red: Pending execution or processing.

F. Pagination

- The job plan list should be paginated, displaying a maximum of 10 job plans per page.
- Pagination controls (e.g., page numbers, "Next", "Previous") should be clearly visible and easy to use.

G. Filtering by Environment

- Users should be able to filter the job plans by the environment using a dropdown filter (e.g., All, Dev, Cert, Prod).
- The page should dynamically update the job plan list based on the selected environment.

V. UI/UX REQUIREMENTS

• Responsive Design:

The layout should be responsive and adapt to various screen sizes.

• Table Design:

The job plan table should have a clear, card-based layout with well-defined rows and columns. The environment status color-coding should be visually distinct to quickly convey the job status.

Hover/Click Interactions:

- The job plan name (under the **Job Plan** column) should be clearly indicated as a clickable element (e.g., hover effect, underline).
- Hovering over the environment status should show a tooltip or additional information (e.g., "Execution successful in Dev environment").





Search Box and Filters:

The search field and environment filter should be easily accessible at the top of the page for quick navigation.

VI. NON-FUNCTIONAL REQUIREMENTS

• Security:

Users must be authorized to access job plan data, with access control implemented to restrict visibility to authorized users only.

• Performance:

The job plan list should load quickly, even when filtering by different environments or applying search criteria.

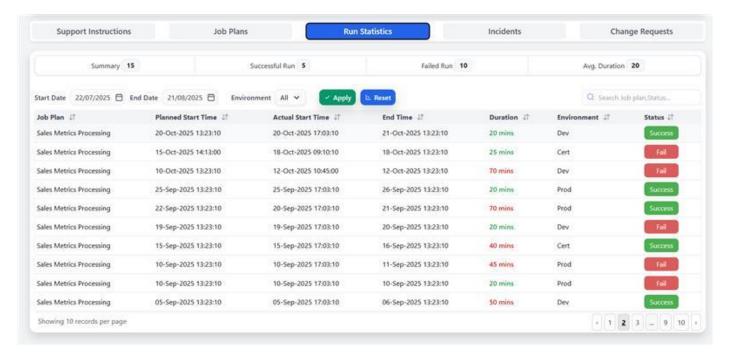
• Error Handling:

The system should handle errors gracefully, such as when no job plans match the search criteria or filters, displaying a message like "No results found."





4.1.1.3 RUN STATISTICS TAB



I. PURPOSE

The **Run Statistics** tab provides users with a detailed breakdown of a job's execution history, helping to analyze trends, identify failures, monitor SLA adherence, and improve operational oversight.

II. TAB BEHAVIOR & DEFAULT LOAD

- This is the third tab on the Job Detail Page.
- Data is loaded dynamically when this tab is selected.
- On initial load:
 - Start Date = Today 30 days
 - o End Date = Today
 - Environment = All environments (Dev, QA, Prod)

III. HEADER AND CONTROLS

A. Dynamic Filters Section

A filter bar, consistent with the **UC4 Jobs List Page**, is displayed at the top of the tab with the following filters:

Filter Name	Туре	Default Value	Description
Start Date	Date Picker	Today - 30 days	Start of the filter date range
End Date	Date Picker	Today	End of the filter date range
Environmen	Multi-select	All (pre-	Allows filtering by environment: Dev, Cert, Prod



t	Dropdown	selected)	
Apply	Button	-	Applies all selected filter values
Button			
Reset	Button	-	Resets filters to default (last 30 days, all environments)
Button			

Filters are **not applied automatically** on value change—users must click **Apply**.

IV. SUMMARY TILES

Once filters are applied, four summary tiles are displayed showing statistics for the filtered results:

Tile Title	Description	
Summary	Total number of job runs in selected date range and environments	
Successful Runs	Count of successful runs	
Failed Runs	Count of failed runs	
Avg. Duration	Average duration (in minutes) of runs in filtered range	

- Summary tiles update dynamically when filters are changed.
- Each tile has a consistent design, with equal size and spacing.

V. SEARCH FUNCTIONALITY

Inline **search input** is enabled above or within the table for:

Column Name	Searchable?	Behavior
Job Plan	Yes	Partial or full match
Duration	Yes	Numeric input; supports >, <, =
Status	Yes	Supports "Success" / "Fail"

Search works in conjunction with filters and pagination.

VI. DATA TABLE

Displays the filtered list of job runs in tabular format:

Column Name	Description
Job Plan	Job Plan of which the job is a part
Planned Start Time	Scheduled job start time
Actual Start Time	Actual time the job started execution
End Time	When the job finished
Duration	Total run time in minutes; SLA-based highlight applies
Environment	The environment where job was executed (Dev, Cert, Prod)
Status	Job result (Success / Fail); shown using color-coded badges





- **Sorting** is enabled on all columns.
- **Default Sort**: Actual Start Time in **descending** order.
- Pagination: 10 records per page (with controls to move through pages).
- Word wrap enabled where necessary (e.g., long Job Plan names).

VII. SLA-BASED DURATION HIGHLIGHTING

Each **Duration** value and **Avg. Duration** is compared to the **SLA**:

Condition	Display
	Color
Duration/Avg. Duration < SLA	Green
Duration /Avg. Duration > SLA	Red

- Applies to each individual run (row-level).
- Helps quickly identify runs that exceeded acceptable thresholds.

VIII. UI/UX REQUIREMENTS

Component	Requirement	
Filter/Search Buttons	Uniform width, center-aligned labels	
Summary Tiles	Aligned in a single row, same size, responsive on various screen sizes	
Table Sorting	All columns sortable.	
Status Badges	"Success" = Green; "Fail" = Red (pill-style badge)	
Pagination	Visible below the table, supports previous/next and page numbers	
Layout	Consistent with UC4 Jobs list page design	

IX. FUNCTIONAL REQUIREMENTS SUMMARY

Feature	Specification
Header Style	Same as UC4 Jobs List Page (no fixed header)
Filters	Start Date, End Date, Environment
Default Filters on Load	Last 30 days, All environments
Search	Job Plan, Duration, Status
Summary Tiles	Summary, Successful Runs, Failed Runs, Avg. Duration
Sorting	All columns sortable.
Default Sort	Actual Start Time (Descending)
Pagination	10 rows per page
SLA-Based Duration Highlighting	Green < SLA; Red > SLA



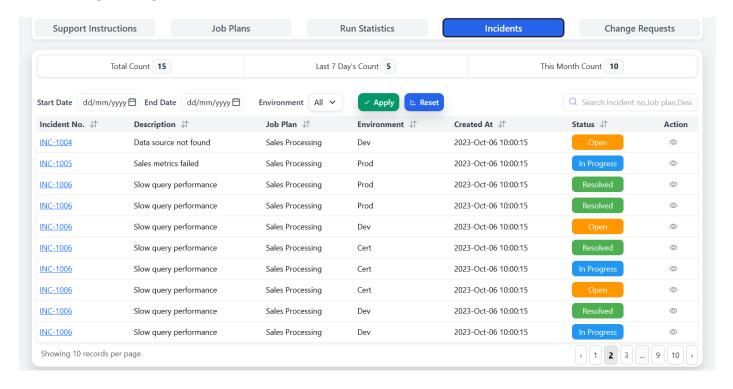
X. NON-FUNCTIONAL REQUIREMENTS

- Filters, search, and pagination should work with efficient backend APIs.
- Job data must be **fetched dynamically**; avoid full page reloads.
- Component styling and interaction must comply with accessibility standards.





4.1.1.4 INCIDENTS TAB



I. PURPOSE

The **Incidents** tab displays all incidents associated with the selected job. It provides job-specific operational issue tracking and links to the incident system (e.g., ServiceNow) for further investigation and resolution details.

II. TAB BEHAVIOR & DATA SCOPE

- This is the **fourth tab** on the **Job Detail Page**.
- On load, it fetches incident records related to the selected job.
- Shows incidents created within a specified date range and/or environment.
- By default, it loads data for the last 30 days and all environments.

III. HEADER SECTION (SUMMARY TILES)

Three summary tiles are displayed at the top of the tab to provide a quick view of incident volume:

Tile Title	Description		
Total Count	Total number of incidents linked to the job (all time or filtered)		
Last 7 Day's Count Count of incidents created in the last 7 calendar days			
This Month Count	Incidents created within the current calendar month		

• Tiles do not update dynamically when filters are applied.





IV. FILTERS SECTION

A filter bar is displayed similar to the UC4 Jobs Page.

Filter Name	Туре	Default Value	Description	
Start Date	Date Picker	Today - 30 days	Filters incidents created on or after this date	
End Date	Date Picker	Today	Filters incidents created on or before this date	
Environmen	Multi-select	All	Filters incidents based on selected environment(s)	
t	Dropdown	environments		
Apply	Button	_	Applies selected filters	
Button				
Reset	Button	_	Resets filters to default (last 30 days, all environments)	
Button				

Filters are not auto-applied. User must click **Apply** to view filtered results.

V. SEARCH FUNCTIONALITY

A search box is provided at the top-right of the table.

Supported Columns	Search Support	Notes	
Incident No.	Yes	Partial or full match	
Description	Yes	Keyword-based text search	
Job Plan	Yes	Searchable job plan name	
Environment	Yes	Searches exact match (e.g., Dev, QA, Prod)	
Status	Yes	Accepts values like "Open", "In Progress"	

VI. DATA TABLE (INCIDENT LIST)

The filtered incident data is shown in tabular format with the following columns:

Column Name	Description	
Incident No.	Hyperlinked to open the ServiceNow incident in a new tab (if API is provided)	
Description	Short incident summary	
Job Plan	Job plan associated with the incident	
Environment	The environment where the incident occurred (Dev, Cert, Prod)	
Created At	Timestamp when the incident was logged	
Status	Incident state – e.g., Open, In Progress, Resolved – shown as color badge	
Action	Eye icon for viewing incident details on popup	

All columns are sortable (ascending / descending).

Default sort is by Created At (Descending).



VII. INCIDENT NUMBER HYPERLINKING (SERVICENOW INTEGRATION)

Feature	Description		
Hyperlink on Incident No.	Each Incident No. links to a unique ServiceNow incident page		
Link Behavior	Opens in new browser tab		
Data Source	URLs will be fetched using ServiceNow API or provided format by client		
Fallback	If API fails, disable hyperlink and show plain text		

The hyperlink format or mapping logic will be implemented once the **ServiceNow API endpoint / base URL pattern** is shared by the client.

VIII. STATUS BADGE UI BEHAVIOR

Status	Badge Color	
Open	Orange	
In Progress	Blue	
Resolved	Green	

• Use pill-style or rounded badges for consistency.

IX. PAGINATION

- Pagination is enabled below the table.
- Default: 10 records per page
- Includes previous / next buttons and page number indicators.

X. UI/UX REQUIREMENTS

Component	Requirement		
Filter Controls	Match style and layout of UC4 Jobs page		
Button Alignment	Apply and Reset buttons of equal width and center-aligned text		
Status Badges	Consistent color coding for clarity		
Column Sorting	Enabled on all columns except Action.		
Table Responsiveness	Auto-fit to screen, scrollable on small resolution		

XI. FUNCTIONAL REQUIREMENTS SUMMARY

Feature Specification



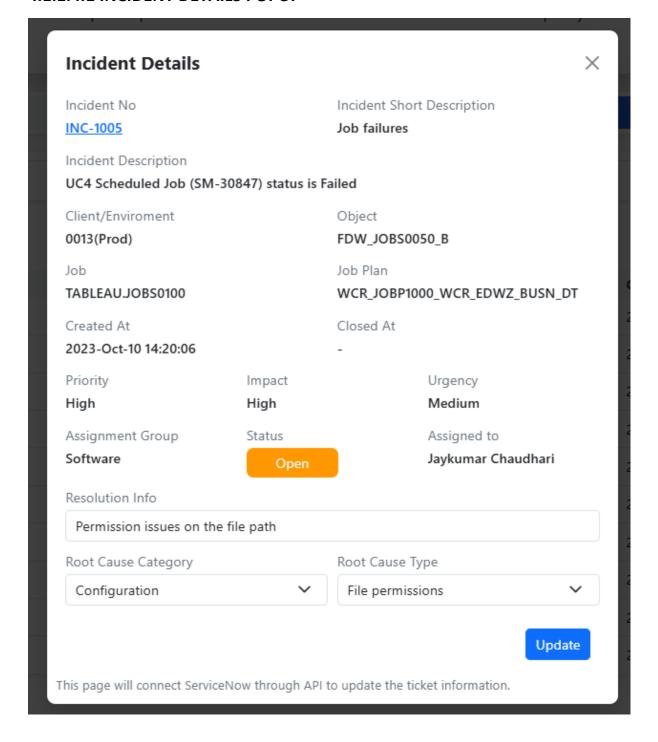
Summary Tiles	Total, Last 7 Days, This Month		
Filters	Start Date, End Date, Environment		
Search	Supported on Incident No, Description, Job Plan, Environment, Status		
Sortable Columns	All columns sortable.		
Default Sort	Created At (Descending)		
Incident No. Hyperlinking	Opens ServiceNow incident page in new tab (based on client API)		
Status Badges	Color-coded based on status		
Pagination	10 records per page		

XII. NON-FUNCTIONAL REQUIREMENTS

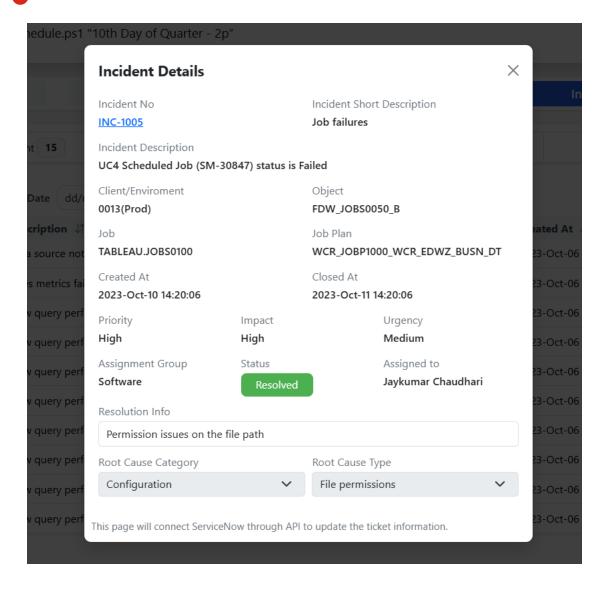
- Backend APIs must support:
 - o Filtering by date and environment
 - Search queries across supported columns
 - o Pagination with metadata
- UI should be:
 - o Responsive on standard resolutions
 - o Accessible with screen readers and keyboard navigation
- ServiceNow integration to be implemented post API link provision.



4.1.1.4.1 INCIDENT DETAILS POPUP







I. PURPOSE

This popup provides detailed information on a specific incident linked to a UC4 Job. Users can view and, depending on the incident's status, edit certain fields. This ensures proper documentation, tracking, and resolution of job-related incidents through ServiceNow integration.

II. TRIGGER & BEHAVIOR

- Triggered from the Incidents tab by clicking the "View (eye)" icon in the Action column.
- Opens a **centered modal popup** overlaying the current screen.
- Modal includes a Close (X) icon in the top-right corner.





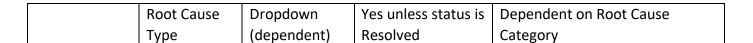
III. FIELDS & LAYOUT

A. Field Overview

All fields below are **editable by default**. However, if the incident's **Status is Resolved**, the **fields become read-only**, and the **Update button is hidden**.

Section	Field Name	Туре	Editable?	Description
Header Info	Incident No	Hyperlinked	Always	Opens ServiceNow incident in
		Text	(Hyperlinked)	new tab
	Short	Text Input	Yes unless status is	Title of the incident
	Description		Resolved	
	Incident	Multiline Text	Yes unless status is	Detailed incident narrative
	Description		Resolved	
	Created At	DateTime	Yes unless status is	Timestamp when incident was
		Picker	Resolved	created
	Closed At	DateTime	Yes unless status is	Timestamp when incident was
		Picker	Resolved	closed
Identification	Client/Enviro	Text Input	Yes unless status is	Client impacted by the incident
	nment		Resolved	
	Object	Text Input	Yes unless status is	Affected object/component
			Resolved	
	Job	Text Input	Yes unless status is	The associated job name
			Resolved	
	Job Plan	Text Input	Yes unless status is	The associated job plan name
			Resolved	
Classification	Priority	Dropdown	Yes unless status is	Priority (e.g., P1, P2, P3)
			Resolved	
	Impact	Dropdown	Yes unless status is	Impact level (Low, Medium,
			Resolved	High)
	Urgency	Dropdown	Yes unless status is	Urgency level (Low, Medium,
			Resolved	High)
Assignment	Assignment	Dropdown	Yes unless status is	Team responsible
Info	Group		Resolved	
	Status	Dropdown		Open / In Progress / Resolved
			Resolved	
	Assigned To	Dropdown or	Yes unless status is	Assignee name
- 4:		Text	Resolved	
Configuration	Configuratio	Text Input	Yes unless status is	Related job or system item
Details	n Item		Resolved	
Resolution	Resolution	Multiline Text	Yes unless status is	Description of how the issue was
Details	Info		Resolved	resolved
	Root Cause	Dropdown	Yes unless status is	E.g., Configuration, Data,
	Category		Resolved	Network, Application





IV. STATUS-BASED BEHAVIOR

Incident Status	Field Editability	Update Button
Resolved	All fields are read-only	Hidden
Open	All fields are editable	Visible
In Progress	All fields are editable	Visible

V. ACTIONS

1. Update Button

- Visible only when status is Open or In Progress
- On click:
 - Validates mandatory fields (if applicable).
 - Sends ServiceNow API request to update the ticket.
 - o Displays success or failure message.
 - o Closes modal and optionally refreshes Incidents tab.

2. Close (X)

• Dismisses the popup without saving changes.

VI. UI & DESIGN NOTES

Element	Behavior / Style
Modal Width	Fixed width (e.g., 600px), scrollable for overflow
Status Badge	Color-coded (Open = Orange, In Progress = Blue, Resolved = Green)
Update Button	Blue, right-aligned, hidden if status is Resolved
Hyperlink (Incident No)	Opens ServiceNow URL in a new browser tab

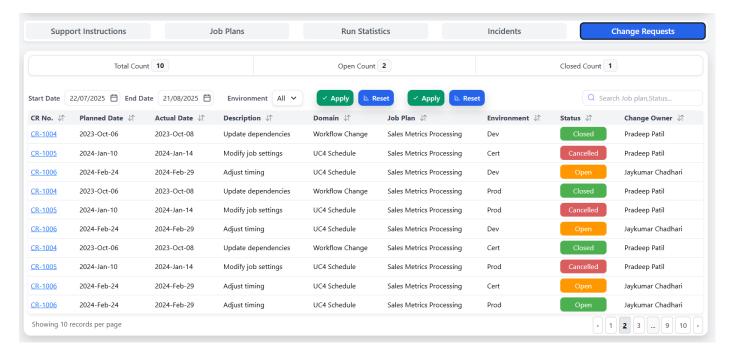
VII. NON-FUNCTIONAL REQUIREMENTS

- **Responsiveness**: Modal should adapt to various screen sizes.
- Accessibility: Support keyboard navigation and screen readers.
- **Performance**: API call for updating should be completed within few seconds.
- **Security**: Integration with ServiceNow must use secure authentication and authorization.





4.1.1.5 CHANGE REQUEST TAB



I. PURPOSE

The **Change Request Tab** displays a list of all change requests associated with a selected UC4 job. It allows users to view, search, and filter change records related to job scheduling, workflows, and configuration changes.

This helps ensure visibility into ongoing and historical job modifications and provides quick access to change ownership and timelines.

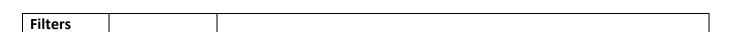
II. TAB BEHAVIOR

- This tab is the **fifth section** on the **Job Details page**.
- Data is fetched from snowflake for the selected UC4 Job.
- By default, the tab shows **change requests from the last 3 months** (based on Planned Date).
- Filters are auto-applied on load.

III. FILTERS AND CONTROLS

Filter Field	Туре	Behavior	
Start Date	Date Picker	Defaults to 3 months prior from today	
End Date	Date Picker	Defaults to today	
Search Bar	Free Text	Searches across CR No, Description, Domain, Change Owner, and Status	
	Search		
Clear	Button	Resets all filters to default values	





IV. DATA TABLE COLUMNS

Column	Туре	Description	Behavior
Name			
CR No.	Hyperlink	Unique Change Request ID	Click opens the CR in a new browser tab
	ed Text		(if URL is available)
Planned	DateTime	Scheduled time for applying the	Sortable
Date		change	
Actual	DateTime	Time when change was actually	Sortable
Date		implemented	
Descripti	Text	Summary of the change	Searchable, Sortable
on			
Domain	Text	Area of change (e.g., UC4 Schedule,	Searchable, Sortable
		Workflow Change)	
Job Plan	Text	Job plan title	Searchable, Sortable
Environ	Text	Applicable environment	Searchable, Sortable
ment			
Status	Badge/La	Open, Closed, Cancelled	Color-coded (Open = Orange, Closed =
	bel		Green, Cancelled = Red); Searchable,
			Sortable
Change	Text	Person responsible for the change	Searchable, Sortable
Owner			

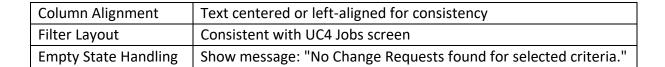
V. TABLE BEHAVIOR

Feature	Description	
Sorting	Enabled on all columns	
Search	Applies across: CR No, Description, Domain, Job Plan, Change Owner,	
	Status	
Pagination	Default 10 records per page, supports navigation	
Default Sort Order	By Planned Date (Descending)	
Word Wrap	Description column wraps text; 2-line max with ellipsis () overflow	
Hyperlink	CR No is clickable and opens CR details in new tab (ServiceNow or other)	

VI. UI & DESIGN NOTES

Element	Behavior / Style	
Status Badge	Open (Orange), Closed (Green), Cancelled (Red)	





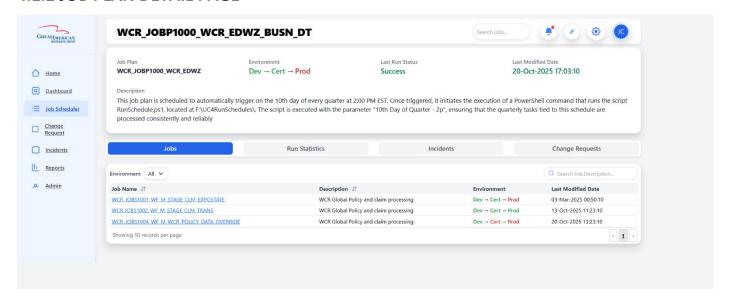
VII. NON-FUNCTIONAL REQUIREMENTS

Category	Requirement	
Performance	Table should load within seconds	
Security	All change request data must follow role-based access control	
Responsiveness	Table and filters must display correctly across desktops	
ServiceNow Integration	If API available, CR No will link to the corresponding record in ServiceNow	





4.1.2 JOB PLAN DETAIL PAGE



I. PURPOSE

The **Job Plan Detail Page** provides detailed information on an individual job plan, including job execution details, associated incidents, and change requests. It offers users the ability to track and monitor job execution status, review job logs, and access associated incidents and change requests.

II. NAVIGATION

- Accessed via: Clicking the Job Plan hyperlink on the Job Scheduler page or from the Job Plan List.
- The page provides quick access to various job plan-related data, with sections for **Jobs**, **Run Statistics**, **Incidents**, and **Change Requests**.

III. PAGE LAYOUT

A. Header Section

- Job Plan Title: The name of the job plan is displayed prominently.
- **Environment**: The environment for the job plan (e.g., Dev \rightarrow Cert \rightarrow Prod).
- Last Run Status: Displays the outcome of the most recent job execution (e.g., Success or Failure).
- Last Modified Date: Timestamp showing when the job plan was last modified.

B. Job Plan Overview

Description: A brief description of the job, explaining its function and purpose.





IV. FUNCTIONAL REQUIREMENT

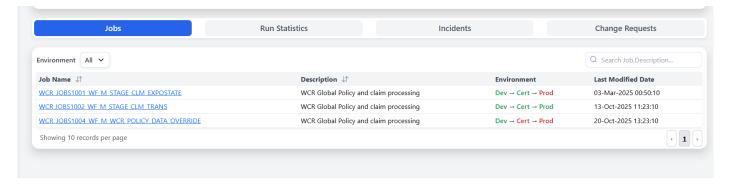
A. Tab Behavior

- The **default tab** open should be **Jobs**.
- The page should use **dynamic tab navigation**. When users click on tabs like **Jobs**, **Run Statistics**, **Incidents**, or **Change Requests**, the content area below the header should update **without reloading the page**.





4.1.2.1 JOBS TAB



I. PURPOSE

The **Jobs Tab** provides a detailed list of all jobs associated with the selected Job Plan. It allows users to view job names, descriptions, environments, and the last modified dates, along with quick navigation to individual job detail pages.

II. NAVIGATION

Accessed via: Clicking on the Jobs tab within the Job Plan Detail Page.

This is the **default tab** displayed when the Job Plan Detail Page loads.

III. PAGE LAYOUT

A. Filter Section

• Environment Filter: Dropdown with options (Dev, Cert, Prod) to filter jobs by environment.

B. Search Bar

Search Input: Allows users to search jobs by Job Name or Description.

C. Job List Table

Displays jobs in a tabular format with the following columns:

- Job Name: Hyperlinked to the Job Detail Page.
- **Description**: A short summary of the job.
- **Environment**: Displays all environments for the job (Dev \rightarrow Cert \rightarrow Prod).
- Last Modified Date: Displays the timestamp of the last modification.

Pagination:

- Default 10 records per page.
- Navigation controls (Previous, Next) for additional pages.





• Enabled on Job Name, Description, and Last Modified Date columns.

IV. FUNCTIONAL REQUIREMENTS

1. Hyperlink Navigation:

a. Clicking **Job Name** opens the respective **Job Detail Page** in the same tab.

2. Filtering:

a. Selecting an environment from the dropdown dynamically updates the job list without a full page reload.

3. Search:

a. The search bar filters jobs by **Job Name** and **Description** in real time.

4. Sorting:

a. Users can sort the table by clicking on the column headers for **Job Name**, **Description**, and **Last Modified Date**.

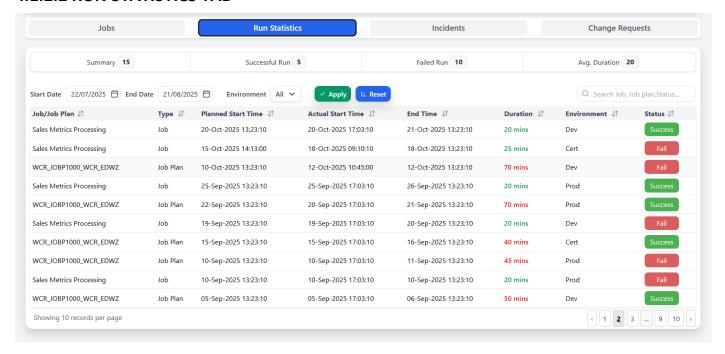
5. **Default Behavior**:

- a. The Jobs Tab loads first when the Job Plan Detail Page opens.
- b. Environment Filter defaults to All.





4.1.2.2 RUN STATISTICS TAB



I. PURPOSE

The **Run Statistics Tab** provides detailed information about the execution history of jobs and job plans under the selected Job Plan. It allows users to monitor run performance, analyze execution trends, and identify failures or SLA breaches.

II. NAVIGATION

Accessed via: Clicking on the Run Statistics tab on the Job Plan Detail Page.

III. PAGE LAYOUT

A. Summary Section

- Summary: Displays total number of runs.
- Successful Runs: Count of runs with status Success.
- Failed Runs: Count of runs with status Fail.
- Avg. Duration: Displays the average execution time across all runs.

B. Filters Section

- Start Date / End Date: Calendar inputs to filter runs by date range. Default set to last 1 month from current date.
- Environment Filter: Dropdown with options (Dev, Cert, Prod).





- Apply Button: Applies selected filters to the table.
- Reset Button: Clears all applied filters.

C. Search Bar

Search for records by Job Name, Job Plan, Type, Environment or Status.

D. Run Statistics Table

Displays execution details in tabular format with the following columns:

- Job/Job Plan: Name of the job or job plan.
- Type: Indicates whether it is a Job or Job Plan.
- Planned Start Time: Scheduled start time for the run.
- Actual Start Time: Actual execution start time.
- End Time: Actual completion time.
- **Duration**: Total time taken for the execution (with color indicators).
 - Green: SLA met (duration <= SLA).
 - Red: SLA breached (duration > SLA).
- Environment: Dev / Cert / Prod.
- Status: Success (green) or Fail (red).

Pagination:

Displays 10 records per page with navigation controls.

Sorting:

Enabled on all columns.

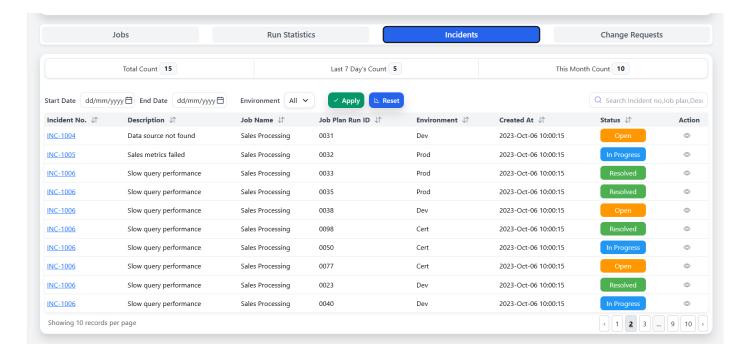
IV. FUNCTIONAL REQUIREMENTS

- 1. Dynamic Data Update:
 - a. Table updates dynamically based on filter criteria without page reload.
- 2. Sorting & Filtering:
 - a. Users can sort by any column.
 - b. Filters apply in combination (date range + environment).
- 3. Color Indicators:
 - a. **Green**: Duration within SLA.
 - b. Red: Duration exceeds SLA.
- 4. Default Behavior:
 - a. Default date range = Last 30 days.
 - b. Default environment filter = All environments selected.





4.1.2.4 INCIDENTS TAB



I. PURPOSE

The **Incidents Tab** displays all incidents associated with the selected Job Plan. It provides users with detailed visibility into open, in-progress, and resolved incidents. Users can filter incidents, view statuses, and navigate to incident details for troubleshooting.

II. NAVIGATION

Accessed via: Clicking the Incidents tab on the Job Plan Detail Page.

III. PAGE LAYOUT

A. Summary Section

- **Total Count:** Displays the total number of incidents.
- Last 7 Day's Count: Displays the number of incidents created in the past 7 days.
- This Month Count: Displays the number of incidents created in the current month.

B. Filters

- Start Date / End Date: Calendar fields for date range filtering.
- Environment: Dropdown filter with options (Dev, Cert, Prod).
- Apply Button: Applies selected filter criteria to the incident list.



J,

• Reset Button: Clears all applied filters.

C. Search Bar

 Allows users to search by Incident No., Job Name, Job Plan, Description, Run ID, Environment or Status.

D. Incident Table

Displays the following columns:

- **Incident No.:** Hyperlinked to open the Incident Detail Page on ServiceNow (subject to ServiceNow API is provided).
- **Description:** Brief text explaining the issue.
- Job Name: Name of the associated job.
- Job Plan Run ID: Run ID associated with the incident.
- Environment: Dev / Cert / Prod.
- **Created At:** Timestamp when the incident was created.
- Status: Displays the current status with color coding:
 - Open: OrangeIn Progress: BlueResolved: Green
- Action: Eye icon for viewing incident details. The Incident Details popup open up.

Pagination:

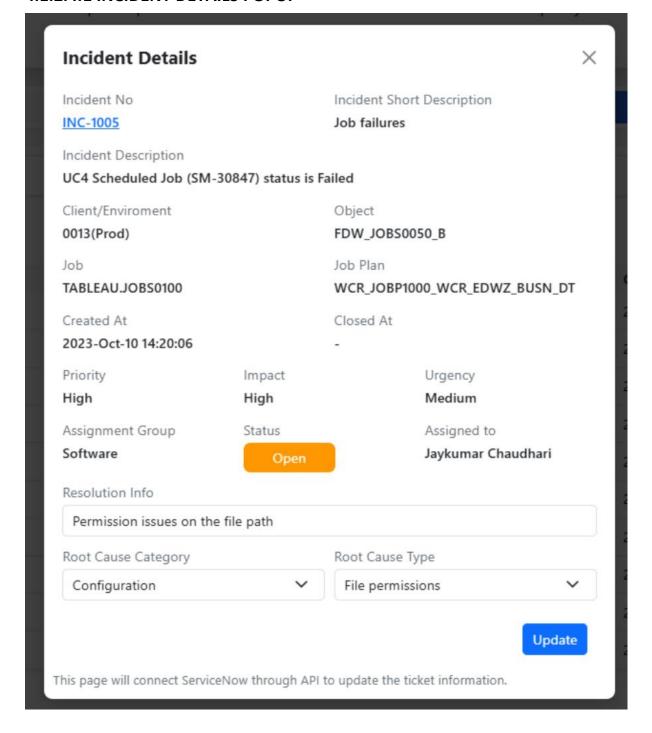
- Default: 10 records per page.
- Navigation buttons for multiple pages.

IV. FUNCTIONAL REQUIREMENTS

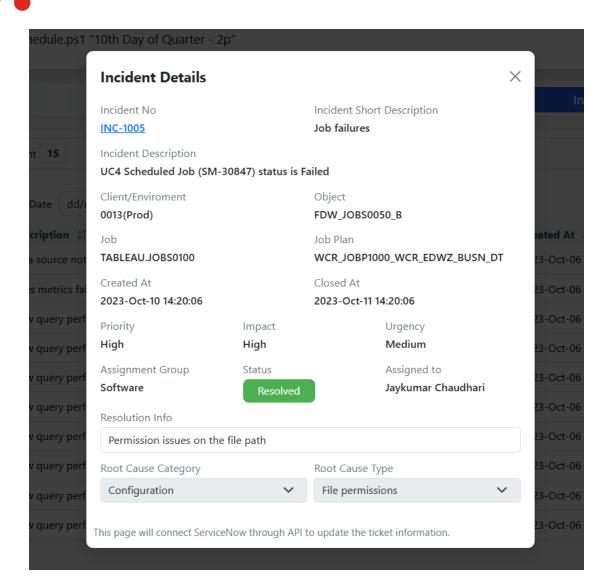
- 1. Dynamic Data Loading:
 - a. Incident list updates dynamically when filters or search are applied.
- 2. Hyperlink Behavior:
 - a. Clicking Incident No. opens the ServiceNow Incident Detail Page on a new tab.
- 3. Status Indicators:
 - a. Color-coded statuses as per the mockup for quick identification.
- 4. Default Behavior:
 - a. Default view shows incidents for the last 30 days.
 - b. Default environment filter = **All environments selected**.
- 5. Sorting:
 - a. Sorting enabled on Incident No., Description, Job Name, Job Plan Run ID, Enviroment, Created At and Status.



4.1.2.4.1 INCIDENT DETAILS POPUP











I. PURPOSE

The **Incident Details Popup** provides complete information about a selected incident associated with the job plan. This popup allows users to review the incident details without navigating away from the Job Plan Detail Page.

II. REFERENCE

The functionality, fields, and behavior of this popup are identical to the **Incident Details Popup** described in **Section 4.1.1.4.1**.

For consistency and to avoid duplication, refer to **Section 4.1.1.4.1 INCIDENT DETAILS POPUP** for detailed specifications.

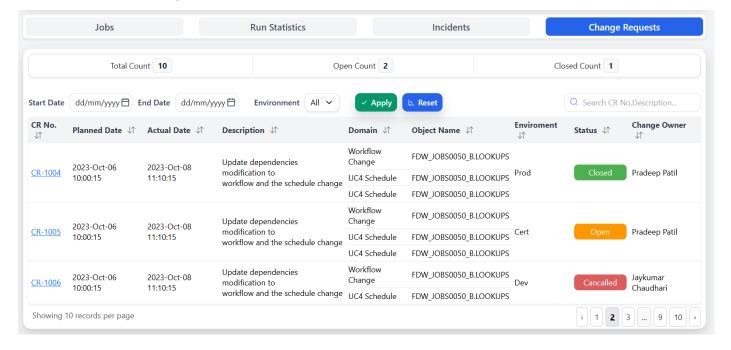
III. FUNCTIONAL REQUIREMENT

- The Incident Details Popup for **4.1.2.4** inherits all functional and non-functional specifications from **Section 4.1.1.4.1**.
- Any enhancements or changes in Section 4.1.1.4.1 will automatically apply to this section.





4.1.2.5 CHANGE REQUEST TAB







I. PURPOSE

The **Change Request (CR) Tab** provides a detailed view of all change requests associated with the selected Job Plan. It allows users to track planned and actual dates, monitor CR status, and view additional details such as description, domain, object name, environment, and change owner.

II. NAVIGATION

Accessed via: Clicking the Change Requests tab on the Job Plan Detail Page.

III. PAGE LAYOUT

A. Summary Section

- Total Count: Displays the total number of change requests linked to the job plan.
- **Open Count:** Displays the total number of CRs currently in **Open** status.
- Closed Count: Displays the number of CRs marked as Closed.

B. Filters

- Start Date / End Date: Calendar fields to filter CRs by date range.
- Environment: Dropdown filter with options (Dev, Cert, Prod).
- **Apply Button:** Applies the selected filter criteria to the list.
- Reset Button: Clears all applied filters.

C. Search Bar

 Allows searching by CR No., Description, Domain, Object Name, Environment, Status or Change Owner.

D. Change Request Table

Displays the following columns:

- CR No.: Hyperlinked to open detailed Change Request information on ServiceNow (subject to ServiceNow API being provided)
- Planned Date: Scheduled date and time for the CR implementation.
- Actual Date: Actual date and time when the CR was executed.
- **Description:** Brief details of the CR (e.g., dependency updates, workflow modifications).
- **Domain:** The domain or category under which the CR falls (e.g., Workflow Change, UC4 Schedule, Informatica).
- **Object Name:** The name of the associated object or job.
- **Environment:** Environment associated with the CR (Dev / Cert / Prod).
- Status: Current status of the CR with color codes:





Closed: GreenOpen: OrangeCancelled: Red

• Change Owner: Name of the user responsible for the CR.

Pagination:

Default: 10 records per page.

• Navigation buttons for multiple pages.

IV. FUNCTIONAL REQUIREMENTS

1. Dynamic Data Loading:

a. Change Request list updates dynamically when filters or search are applied.

2. Hyperlink Behavior:

a. Clicking **CR No.** opens the **Change Request Detail Page** on a new tab (subject to ServiceNow API being provided).

3. Status Indicators:

a. Color-coded statuses for quick identification (Green for Closed, Orange for Open, Red for Cancelled).

4. Default Behavior:

- a. Default environment filter = All environments selected.
- b. Default sort order = CR No. (ascending).

5. Sorting:

a. Sorting enabled on **CR No., Planned Date, Actual Date, Domain, Object Name Environment, Status** and **Change Owner**.

6. Handling Multiple Domains and Object Names for a Single CR:

- A single Change Request can have multiple domains and multiple object names.
- In such cases:
 - CR No., Planned Date, Actual Date, Description, Environment, Status, and Change Owner columns remain common and will span multiple rows.
 - o **Domain** and **Object Name** will have separate entries for each associated value.
 - This ensures that all related domains and objects are displayed clearly under a single CR grouping.





5. NON-FUNCTIONAL REQUIREMENTS

Requirement	Details	
Performance	System should support concurrent users with minimal response	
	time	
Scalability	Support scaling to multiple users as needed	
Security	Role-based access control (RBAC); Okta integration	
Availability	99.9% uptime, hosted on GAIG's Tanzu platform	
Logging and Monitoring	Centralized logging with error tracking	
Data Refresh	Batch and near real-time from Snowflake DB	
Browser Compatibility	Chrome, Edge	

6. USER ROLES AND PERMISSIONS

Role	Permissions	
Administrator	Full access to all modules, user and role management, and report	
	configuration	
Developer	View/edit job details, add support docs, view logs/incidents	
Read-Only User	View-only access to all modules and reports	
Support Engineer	Edit support documentation and log resolutions	

7. DEPENDENCIES

Dependency	Owner
Snowflake DB setup and data	GAIG ETL Team
API access to UC4, ServiceNow	GAIG
CI/CD pipeline setup	GAIG
Okta SSO configuration	GAIG
VDI Access	GAIG
Access to GitHub, ServiceNow	GAIG

8. REPORTING REQUIREMENTS

• Power BI embedded reports to be used for dashboards and operational metrics.



9. ERD & DATA MODEL

