

# Project Gold Documentation Report

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<https://wiki.at.sky/display/DigitalID/>

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## Overview

A new Confluence space has been created to accompany the platform transformation carried out for Project Gold: <https://wiki.at.sky/display/DigitalID/>

This draws on various existing documentation sets, primarily: <https://wiki.at.sky/display/GIAM/Sky+Identity>.

Others which were reviewed for unique content and/or later versions were:

<https://wiki.at.sky/display/OTTIDENT/OTT+Identity+Home>

<https://wiki.at.sky/display/IDCYBER/OTT+ID+--+Cybertron+Home>

<https://wiki.at.sky/display/IDL/OTT+Reliability+Engineering+Team+Leeds>

<https://wiki.at.sky/display/OIR/OTT+ID+Rango+Home>

<https://wiki.at.sky/display/OTTID/Identity+Home>

[OTT-Architecture Home - OTT-Architecture - Sky Confluence \(at.sky\)](#)

<https://wiki.at.sky/display/OIE/OTT+ID+Europa+Home>

<https://wiki.at.sky/display/OIOI/Oogway+Home>

<https://wiki.at.sky/display/skyidentity/OTT+ID+--+Leeds+Sky+Identity>

These spaces contained a small amount of unique data which, where relevant, was also migrated into the new site structure. Much of the content of these sites constituted verbatim repetition including errors and omissions.

The purpose of the new Confluence space is to consolidate, update and impose structure upon all required information for the operation of the platform, including comprehensive review to determine accuracy and completeness of instructions and reference sources.

There is an accompanying brief set of guidelines for using the new site that should ensure consistency, a single source of truth and ease of navigation and maintenance: [Working in DigitalID confluence 2023.12](#)

# Build Process

## Initial Review

A review of the /GIAM/ space was conducted to determine pages

- (1) to keep in current form
- (2) to keep but update or complete
- (3) to discard
- (4) that were missing and required writing

Having developed without a defined structure or common standard, many users agreed improving navigability was a high priority.

Around 3,250 pages are distributed between 39 top level headings. Ad hoc cross-referencing and links to multiple external (often deprecated) sources make navigating the site difficult.

With random structure, no governance, incomplete pages and pages in multiple versions, no version control (other than Confluence's page history feature), the /GIAM/ site is slow to use and unreliable.

The /GIAM/ site was selectively allocated for review to individual specialists to determine the above categorisation of existing documents.

The review task was separated into specialist sections, titles added to a spreadsheet and marked according to the 1<sup>st</sup> three categories above.

In each section's spreadsheet, there are columns to note status of initial review, migration and final review.

The review was carried out by members of specialist teams, starting with SRE Security (I3). As three members of I3 were leaving in July and August, it was a priority to capture their knowledge first, and for new starters to build upon.

Example review sheet:

	A	B	C	D	E	F	G	H
1				UPDATED			MIGRATED	APPRO
2								
3	1. Automation	[WIP] A First Look At Understanding Our Pipelines	(1) Keep as is, (2) Keep but update, (3) discard					
4		Automation Repository Overview	(2) This is almost a definitive list of required documentation around automation pipelines				DONE	Y
5		Automated tests	(2) we should remove deprecated repos entirely					
6		Code Review Guidelines - QA	(1) Approved and Updated				DONE	Y
7		IDM Automation Tests and Overview	?					
8		New Automation Code - Best Practices	(1) Approved				DONE	Y
9		Tags used to include and exclude tests from pipelines	(3)				DONE	Y
10		Test Automation Code Review Checklist - QA	(1) Approved - Moved under "Code Review Guidelines - QA" and added references				DONE	Y
11	2. Common Questions	DRAFT: Brown Bag Session - Help	(2) move?				DONE	
12		Google isn't working, how can I fix this?	(1) Approved				DONE	Y
13	3. Getting Started	Identity Journeys						
14		NBCU Peacock Journeys	(3) ? Seems almost impossible to keep updated. Ask Karl				DONE	
15		SkyBroadbandBuddy Client Journey	(1) Approved				DONE	Y
16		Identity Postman Collections	(3) outdated to the point of uselessness				DONE	
17		New Starter Onboarding	(3) outdated, up-to-date docs in onboarding section				DONE	
18		Sky Values (as a tester)	(1) Approved				DONE	Y
19		Tester Matrix	(1)				DONE	
20		Useful Bookmarks	(2) needs updating				DONE	
21	4. Recruitment	Pairing and Interview Grading	(3) ? Should be somewhere else? Not useful for GOLD				DONE	
22		Permanent QA Recruitment	(3) ? Should be somewhere else? Not useful for GOLD				DONE	
23		Pairing Interview	(3) ? Should be somewhere else? Not useful for GOLD				DONE	
24		QA Telephone Interview	(3) ? Should be somewhere else? Not useful for GOLD				DONE	
25		Sample Questions	(3) ? Should be somewhere else? Not useful for GOLD				DONE	
26	5. Terminology		(3)				DONE	
27	6. Test Accounts	German FAA Accounts	? Ask Karl					
28		MCS ID&V data - QA	(3) ? Shouldn't be duplicated across GOLD as we don't want to share test data				DONE	
29		SCMS Test Data	(1)				DONE	
30		Yahoo mailbox creation & access	(1)				DONE	
31	7. Test Strategy	Best Practices	(3)					
32		Feature Testing - Things to consider	(1)					
33		Identity Testing - Focus Group Initiative	VINATHA CHANDA TO DECIDE					
34		Non-Functional Focus Group Space	VINATHA CHANDA TO DECIDE					
35		Identity Testing Manifesto	(1) Approved				DONE	Y
36		Identity Testing - Quarterly Initiatives	(1)				DONE	
37		Smoke tests guideline	(1) Approved - updated				DONE	Y
38		Identity Defect Management	(1) Approved				DONE	Y
39		Defect Dashboard	(1) Approved				DONE	Y
40		Defect notification	(1) Approved				DONE	Y
41		Defect Resolution	(1) Approved				DONE	Y
42		Defect Template	(1) Approved				DONE	Y
43		Defect Triage	(1) Approved				DONE	Y
44		Defect Workflow	(1) Approved				DONE	Y
45		Identity Testing Heuristics	(1) Moved - lots of links to review				DONE	
46	8. Tools & Resources		(3)					

## Migration

Required pages were replicated to the new space with the following amendments:

- Addition of change log table at page top (for process instructions and reference pages)
- Inclusion either of Table of Contents or Child Page menu
- Standardisation of titles, structure and formatting
- Application of UK English spelling as standard
- Removal of links to /GIAM/ space and replication of required linked page in new space

Of the 3,250 pages in /GIAM/ , around 1,800 were migrated and categorised under 8 headings as follows:

ARCHITECTURE	227
ENGINEERING	1,227
SUPPORT & OPERATIONS	88
PRODUCT	95
APMO	200
PEOPLE	151
STRATEGY & FINANCE	3
GLOSSARY	2
Total	1,993

Approximately 200 new pages were created or were imported from the other sites listed in the overview above.

## Final Review

Newly created reference pages in the /DigitalID/ site contain a change log table.

Each page should show date of creation, status of information (either IN DRAFT or APPROVED), stakeholder and owner.

During the complex platform migration at the core of Project Gold, it was difficult to secure regular or sustained attention to documentation from teams working under deadline pressure.

Therefore, much of the new site status remains IN DRAFT, until detailed expert review can confirm that a given page

- Is accurate
- Is current
- Is complete
- Contains no links to deprecated Confluence spaces

Where possible, links to /GIAM/ have been superseded by replication of linked page to /DigitalID/ and update of link.

Where links target other Confluence sites, these links have been retained (rather than replicating the page to the new space), to avoid creeping obsolescence in duplicated content.

Links relating to 3<sup>rd</sup> party providers, Git repositories, APIs and platform components remain to be confirmed by individual information stakeholders.

## New Site Structure

The new site is divided into eight main sections, as determined by department heads:

### ARCHITECTURE

The largest areas of Architecture are Solution Designs and Identity Architecture and Components.

Some pages (e.g. 25% of Solution Designs) are now APPROVED.

Others (e.g. Microservice Design Patterns and its 13 sub-pages) are empty placeholders.

A portal page to Ardoq (3<sup>rd</sup> party data-driven enterprise architecture modelling tool) replaces previous manually maintained diagrams, although the Ardoq resource remains largely unpopulated.

Despite discussions aiming for a single glossary to replace the seven glossary-type documents in /GIAM/ both an Architecture Glossary and a Data Dictionary (in Engineering) were required. Both are incomplete and remain IN DRAFT.

Architecture -> Identity Architecture and Components overlaps with Engineering -> Software -> Components.

It is unhelpful to list all such inconsistencies, but they should be resolved if the documentation is to be navigable and scalable over a sustained period.

### ENGINEERING

The main area of the new space, this contains both reference (Environments, Runbooks) and ongoing reporting such as RAG Statuses, Release Info & Schedule and Identity Tech Talks.

Verified content varies between sections: QA, SRE Platform, SRE I3 have undergone near complete review. SRE Performance was largely signed off without checking; DBA remains unwritten.

### APMO

All relevant content was migrated, and new project documentation was created. Most projects remain incomplete and in draft.

### SUPPORT & OPERATIONS

All relevant content was migrated but many reporting pages were obsolete and process pages were either incomplete or missing.

Some work has been done to remedy this, but much remains to be completed as the new Service Desk is developed to replace former DevOps processes.

### PEOPLE

All relevant content was migrated but Onboarding, Chapterships and Teams pages remain to be completed.

### PRODUCT

All relevant content that could be identified was migrated, to include

- Call Centre ID&V Customer Verifier
- Identity Portal
- Notifications Service
- Product Area Workspace
- Tech Stack
- WIG Platform
- Platform
- Site status report
- Identity Product Strategy Research

A comprehensive review has not been conducted despite prolonged efforts to make it happen. Content of this section is incomplete or missing and unverified.

## STRATEGY & FINANCE

All relevant content that could be identified was migrated, totalling 3 unverified pages.

## GLOSSARY

The contents of all glossary pages were amalgamated and added to, where additional approved definitions could be found. There are several missing definitions that require completion.

An attempt was made to secure consensus on the glossary scope, but this too remains to be defined.

# Page Types

## Process Instructions (Runbooks)

The source site did not categorise information consistently by type, subject, platform area or specialist team.

To remedy this, pages were defined by type and then subcategorised to enable search and ensure single source.

Reference pages containing process instructions for required tasks were distributed across many sections. These were recategorised into Runbooks for each team.

Example:

Source I3 landing page listed the types of responsibilities that team members would have in the daily roles, but the tasks themselves were not documented.

These tasks were turned into I3 Runbook titles, and we collaborated to write the required instructions.

Source site: list of tasks	New site: individual instruction pages per task								
<p><b>i3 team pages</b></p> <p>Created by Ben-Menachem, Oren (Solution Architect), last modified by Carham, Arron (Secu)</p> <p><b>Team Overview</b></p> <p>Identity Incident Investigations, or I3 for short, is organised in Sky as:</p> <p>i3 &lt; Identity SRE &lt; Group Identity and Access Management &lt; Group Digital Trans</p> <p>Our primary responsibility is to look after the identity endpoints and monitor/inve finish in the development process and have control over wide surface area such</p> <p><b>Common Roles and responsibilities:</b></p> <ul style="list-style-type: none"><li>• Unlocking customers that have contacted customer services and are eithe</li><li>• Master locking accounts that should never be accessed again and should</li><li>• Working with the Piracy/Fraud teams in Sky to investigate accounts and sh</li><li>• Updating SSL certs on the identity properties.</li><li>• Working with developers and testers on Slack to resolve logging in issues.</li><li>• Attending Kick off meetings and working with developers to implement see</li><li>• Implementing API definition endpoint protection changes from the develop</li><li>• Managing property access to non-production environments .</li><li>• Managing property rules to create headers for our applications to use.</li><li>• Managing property rules to manage mutual-TLS connections.</li><li>• Managing property rules to implement vendor specific protections to our p</li><li>• Managing lists of allowed, and denied traffic (based on IP, Geography, pat</li><li>• Investigating attack traffic for credential stuffing and DDOS attacks.</li><li>• Creating dashboards for incident investigation, alerting, visibility and resp</li><li>• Creating alerts that will automatically block attacking ip addresses.</li><li>• Creating alerts that will automatically lock compromised accounts.</li><li>• Manually locking compromised accounts based on investigations.</li><li>• Manually blocking attacking IPs based on investigation.</li><li>• Creating alerts for "grey" events that require human intervention.</li><li>• Analysing grey events where automatic rules cannot be bluntly applied.</li><li>• Responding to incidents such as large attacks, system outage, or other cu</li><li>• Implementing and rolling out new security tools to protect our estate.</li><li>• Increasing visibility of potentially unknown attacks.</li><li>• Working with developers to implement actions based on penetration testin</li></ul>	<p><b>I3 Runbook</b></p> <p>Created by Mawson, Ben (Technical Author), last modified on Jul 31, 2023</p> <table border="1"><tr><td>Status</td><td><b>IN DRAFT</b></td></tr><tr><td>Stakeholders</td><td>@Zmarzy, Seweryn (Senior Security Eng Manager)</td></tr><tr><td>Date</td><td>2023.07.27</td></tr><tr><td>Owner</td><td>@Mitchell, Trish (Head of Engineering)</td></tr></table> <ul style="list-style-type: none"><li>• I3 BAU Tasks</li><li>• Attack Playbook</li><li>• Blackbird MySQL Servers not in sync</li><li>• Block Bulk IP Addresses</li><li>• Create alerts</li><li>• Create dashboards<ul style="list-style-type: none"><li>◦ Alerting dashboard</li><li>◦ Incident investigation dashboard</li><li>◦ Response dashboard</li><li>◦ Visibility dashboard</li></ul></li><li>• Create headers for our applications to use</li><li>• Distributed Attack</li><li>• Enable Spark Integration</li><li>• Error 287 OneHelp Page</li><li>• Implement API definition endpoint protection changes</li><li>• Investigate accounts and share data</li><li>• Investigating Traffic Spikes</li><li>• Investigate attack traffic for credential stuffing and DDOS attacks</li><li>• Manage mutual-TLS connections</li><li>• Managing Grey Events</li><li>• Manually block attacking IPs based on investigation</li><li>• Manually lock compromised accounts based on investigations</li><li>• Remedy Hardware Failure</li><li>• Test using Akamai Staging Network</li><li>• Unblock an IP Address</li><li>• Unblock Customer Account</li><li>• Update SSL certs on the identity properties</li><li>• SSL Certificate check</li><li>• RTBE for NOW IE and GB</li><li>• Splunk Stage 1 Runbook</li><li>• GDPR Right to be forgotten - tracker</li></ul>	Status	<b>IN DRAFT</b>	Stakeholders	@Zmarzy, Seweryn (Senior Security Eng Manager)	Date	2023.07.27	Owner	@Mitchell, Trish (Head of Engineering)
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Stakeholders	@Zmarzy, Seweryn (Senior Security Eng Manager)								
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Runbooks were compiled for

1. SRE Security (I3)
2. SRE Platform Engineering
3. SRE Performance Engineering
4. SRE Database
5. QA
6. Core Platform
7. Support and Operations
8. Release

## Reference

Examples include data flow diagrams, tooling, platform environments.

## Reporting

Examples include Release Info and Schedule & SRE Platform RAG Statuses.