



Digital Prescribing & Dispensing Pathways Programme



**Business
Architecture**

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DPDP Business Architecture

Introduction



Introduction

Purpose

The purpose of this document is to describe the business architecture of the digital prescribing and dispensing pathways (DPDP) service, including the capabilities, actors and roles that the eventual solution must support and realise in order to successfully deliver the DPDP programme objectives.

The architecture is presented as a series of perspectives, each containing a number of views. Each perspective broadly groups together related views that describe particular areas of architectural concern.

Audience

The primary audience of this document are those stakeholders and other parties who have interests related to the overall business domain. These stakeholders include internal NSS and NES teams, business analysts, potential and incumbent suppliers, business team members from organisations with system dependencies on DPDP or ePharmacy, and Scottish Govt technical strategists.

The secondary audience of this document are those stakeholders: with an interest in the overall delivery of DPDP; technical team members requiring the business context for the solution architecture; stakeholders for other programmes outwith DPDP that have an interest in services with a cross-dependency on the programme. This includes programme leads, business stakeholders, healthcare leads, sponsors, external agencies, suppliers and Scottish Govt healthcare strategists.

Scope

The scope of this document covers the business architecture for the primary care digital prescribing and dispensing domain solution. It does not include the business processes, systems and services that are not part of the DPDP programme, however these may be referenced within the context of the business domain if there is a dependency between the process/service/system in question and digital prescribing.

In scope for the DPDP business architecture are:

- Capabilities, values streams and functions for the following subdomains:
 - Creation and management of prescribed and dispensed items.
 - Advanced Electronic Signature (AES) signing of prescription items.
 - Public Key Infrastructure (PKI).capability
 -
 - API-centric integration of services and components within DPDP, including orchestration and choreography of underlying services, data transformation, service resilience.
 - Notifications service for alerting patients of prescription events.
 - API access control and management.
 - New integration routes (“pipelines”) into existing systems as part of intermediate transition architectures.
 - User registration and authentication for AES.
 - Reference data management.
 - Public access via a portal (possibly as a mobile app) for prescription-related information.
 - Direct messaging between prescribers and dispensers.
 - Monitoring and alerting of services, security events and appropriate usage.

Out of scope

- All aspects of the solution application, data and technical design. This is available in the solution architecture description document [1].
- Analysis of the incumbent ePharmacy (aka ePMS) messaging-based prescription service from Atos. This analysis is available in the document DPDP - Analysis of ePMS.docx [2].

Structure of Document

This document is broken down as follows:

Section	Purpose
Introduction	This section contains the purpose, audience and scope of the document.
Business architecture	This section describes the capabilities and value streams, breaking them down into functions and activities, and also the business actors, role and their core responsibilities
Appendices	This section contains supporting information and further detailed breakdowns.

References

- [1] DPDP Solution Architecture Description: [DPDP Solution Architecture Description.docx](#) (SharePoint permissions required), current version
- [2] Analysis of the incumbent ePMS service: [DPDP - Analysis of ePMS.docx](#) (SharePoint permissions required), current version
- [3] OMG capability documentation reference: [The Strategy To Execution Process Translating Strategy Into Value \(omg.org\)](#)
- [4] Tech target reference: [What is business capability? - Definition from WhatIs.com \(techtarget.com\)](#)
- [5] [ArchiMate® 3.1 Specification: The New Version of the Standard – The Open Group Blog](#)
- [6] ISO/IEC/IEEE 42010 Architectural descriptions: [ISO/IEC/IEEE 42010 : Architecture Descriptions \(iso-architecture.org\)](#)
- [7] DPDP Business Glossary: [Business Glossary.xlsx](#), (Sharepoint permissions required), current version

Business Architecture



Business architecture

The business architecture has been defined at an enterprise level, focusing on those capabilities that are to be used, changed or implemented as new services as part of the DPDP programme. In this context, the enterprise consists of those organisations and individual business actors that closely collaborate to realise the digital prescribing and dispensing service.

The business architecture within this document does not attempt to duplicate the service design or business process models produced within the programme. The following artefacts have been created to show what capabilities are required, which roles are impacted by the move to fully digital prescribing, and allow linking of those capabilities and roles to the realising services implemented or used within the overall service.

Capabilities

A good definition of a business capability from the OMG [3] is:

“A business capability (or simply capability) describes a **unique, collective ability that can be applied to achieve a specific outcome**. A capability model describes the complete set of capabilities an organization requires to execute its business model or fulfil its mission.”

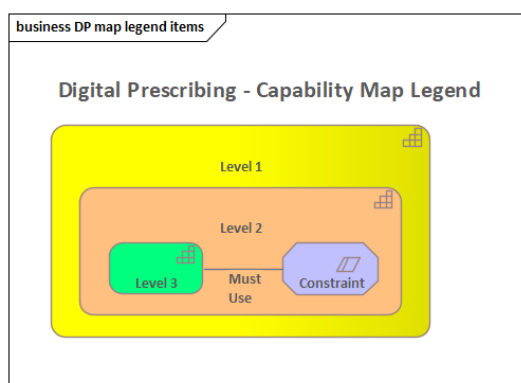
In the context of the DPDP programme, the capabilities cross a number of organisations that collectively collaborate to deliver.

Further discussion on how capabilities help to frame the business domain and link to the solution can be found in an article on the TechTarget website [4].

It should be noted that business capabilities are technology agnostic. Not all the capabilities within the capability map will be delivered or changed as part of the DPDP programme however they are included to highlight the business context of the solution.

Capability Map Legend

This diagram provides the key items for the following capability maps.



Capability Map – Level 1 and Level 2 Capabilities

The following diagram shows the grouping of capabilities into level 1, which represents the highest level grouping of related capabilities, and level 2, which defines and groups more closely related sets of capabilities. Typically within a capability map there is no specific meaning associated with each level and some of the capabilities represented here are further broken down in subsequent diagrams.

Digital Prescribing - Capability Map Levels 1 & 2



Capabilities Descriptions

Capability	Description
Prescription Management	Prescription management covers the capabilities required to create and cancel both prescriptions and items.
Create Prescription	This capability covers the functions needed to create a prescription or item.
Cancel Prescription Item	This capability covers the functions needed to cancel a prescription item that has been sent to DPDP but not collected or delivered
Change Prescription Items to Expired	This capability covers the functions needed to set prescription items to expired after a predetermined period of time from being available to dispense. The time period may not be a single value for all prescription item types.
Print Medication and Repeat List	This capability covers the functions needed to print a list of medication items and instructions for the current prescription as well as a repeat request list.
Dispensing	Dispensing covers the capabilities required to dispense NHS-prescribed items
Dispensing Checks Out of scope for DPDP (PMR functionality)	This capability covers the functions needed to review a prescription or item, including all forms of checking.
Processing	This capability covers the functions needed to process items to be dispensed, including where a dispenser can change the dispensed item from the original prescribed item without input from the prescriber.
Collection Checks	This capability covers the functions needed to check whether a prescription has been collected and update the status when the prescription is collected.
Delivery Check Out of scope for MVP	This capability covers the functions needed for dynamic checks and updates on delivery status.
User Management	User management covers all aspects of the management of users of the DPDP service.
Prescriber Onboarding and Management	This capability covers the functions needed to onboard a prescriber within their LHB. It is a generic capability that will be realised by different services and processes within different organisations in NHS Scotland.
Dispenser Onboarding and Management	This capability covers the functions needed to onboard a dispenser within an organisation. It is a generic capability that will be realised by different services and processes within different commercial CP organisations. For MVP it does not require a CP user to be enrolled in an NHS user directory but internal NHS dispensers may require this in future.
Public Enrolment Out of scope for MVP	This capability covers the functions needed to verify and enrol a member of the public as a user of the personal health portal (this may be delivered as an aspect of the Digital Front Door initiative)
Practice Admin staff onboarding	This capability covers the functions needed to verify and enrol a member of Practice Admin Staff
Prescriber Registration	This critical capability covers the functions needed to register a prescriber with the DPDP service and enable them to sign prescriptions

Capability	Description
Administrative nhs.scot User Administration	This capability covers the functions needed to administer any administrative nhs.scot users of any aspect of the DPDP service.
Manage Repeatable Items	Manage Repeatable Items covers the capabilities for managing repeatedly prescribed or dispensed medication items.
Manage Shared Care Agreement Out of scope for MVP	This capability covers the functions needed to create and manage shared care agreements associated with serial prescriptions
Process Repeat Requests Partially out of scope for MVP	This capability covers the functions needed to initiate, record and process all requests for repeatable items. It is subdivided into several L3 capabilities , some of which are not in scope for MVP or are handled by a prescribing system, not DPDP.
Access Control	Access control covers all aspects of the authentication of users of the DPDP service.
Prescriber Authentication	This capability covers the functions needed to allow prescribers to authenticate themselves specifically as a prescriber within the DPDP services.
Service level authentication	This capability covers the functions needed to authenticate technical services that need to connect to DPDP (for example PMR applications)
Administrative nhs.scot Authentication and Authorisation	This capability covers the functions needed to allow internal nhs.scot administrators to authenticate and be authorised to use aspects of the DPDP services.
Public Access Management Out of scope for MVP	This capability covers the functions needed to allow members of the public to self-manage or be assisted in managing themselves as authenticated users of public-facing aspects of the DPDP services.
Multi-Factor Authentication (MFA) Setup	This capability covers the functions needed to set up the credentials for an enrolled principal for strong, multi-factor authentication.
People Prescription Management	People Prescription Management covers all aspects of personal public access to the prescribing and dispensing services.
Manage Pharmacy Selection	This capability covers the functions needed to allow people to select and change their nominated pharmacy, either by themselves or with a prescriber IT user performing the selector role.
View Prescription and Medication Information Out of scope for MVP	This capability covers the functions needed to allow people to view their prescription and NHS or other pertinent treatment information online.
Nominate Collector Out of scope for MVP	This capability covers the functions needed to allow people to nominate a person to collect their dispensed prescription.
Notification Preference Management Out of scope for MVP	This capability covers the functions needed to allow people to manage their preferences for receiving updates on their prescribed item statuses.
Payment and Claim Management	This capability covers the organisational functions that process claims, check for fraud and make payments. Capabilities herein are not directly in scope for the DPDP programme.

Capability	Description
Verify Claim Out of scope for MVP	This capability covers the functions needed for PSD to verify claims submitted by dispensers.
Claim Payment Out of scope for MVP	This capability covers the functions needed for PSD to pay verified claims submitted by dispensers.
Import Paper Prescription Out of scope for DPDP – TBC by CAG and Prog Board	This capability covers the functions needed to import information from printed paper prescriptions into claims processing.
Claim for Item	This capability covers the functions needed for CPs to submit claims for payment for collected or delivered items and also remuneration-only claims for dispensed but uncollected items.
Claim Reconciliation	This capability covers the functions to verify that a claim has been both submitted by a CP and received by PSD
Shared Capabilities	This capability is a set of shared capabilities that are (or will be) used as intrinsic elements of other capabilities
Security Event Management	This capability covers the security event management and monitoring for the deployed production services in all settings.
Audit of Events	This capability covers the auditing of the event trail for key entities within the service domain, such as the audit trail associated with a prescription history.
Service Monitoring	This capability covers the service monitoring, health checks and alerting for the deployed production services in all settings.
Appropriate Use Monitoring	This capability covers the monitoring function needed to ensure that DPDP is used within the constraints of acceptable, legal use of the service.
Prescription Items Search	This capability covers the functions needed to search for and retrieve a patient, prescription and prescription items
Prescription Item Enquiry	This capability covers the functions needed to view a prescribed, dispensed or collected item, its status and any sequence of audited events associated with it.
Prescription Status Enquiry	This capability covers the functions needed to view the specific status of a pre-identified prescription item without displaying potentially restricted information.
Internal Service Request	This capability covers the functions needed to request additional security-related activities specific to enrolling DPDP users and secured client endpoints. These requests are handled outwith DPDP.
Signing Service	This capability covers the functions needed to generate the security artefacts (key pairs and x.509 certificates, etc) needed to generate and verify the AES signatures, alongside the signature generation and verification capabilities themselves.
MI and Reporting	This capability is the current capability to provide analysis and insight into prescribing across NHS Scotland.
Real-time reporting and Dashboard Out of scope for MVP	This capability covers the functions for real-time reporting and dashboards, showing the immediate metrics of the services.

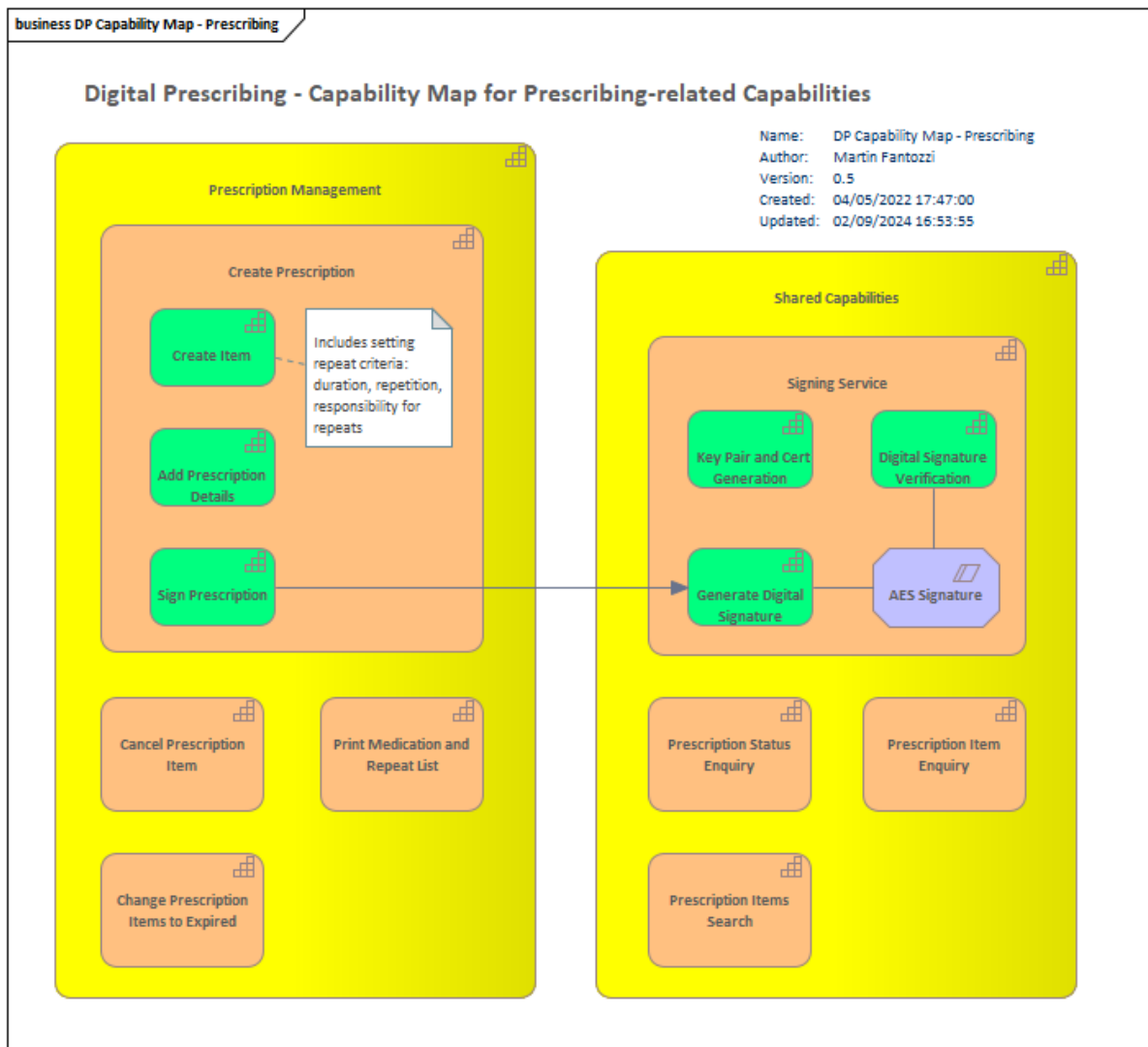
Capability	Description
MI, Insights and Analytics Out of scope for MVP	This capability covers the functions for time-based data metrics, reporting and analysis, typically built up over and covering long durations.
Direct Messaging	This capability covers the capabilities for direct messaging and prescription event notification.
Person-to-person messaging Out of scope for MVP	This capability is the aspirational capability for direct personal messaging for healthcare professionals such as dispenser to prescriber
Notify patient Out of scope for MVP	This is the capability for direct prescription event notification to the patient
Organisation Management	Organisation Management covers the capabilities for enrolling and amending organisations that will use the DPDP services.
Prescriber Organisation Registration	This critical capability covers the functions needed to register a prescriber organisation, such as a GP surgery, to use DPDP services.
Amend Prescriber Organisation	This capability covers the functions needed to maintain the details for a prescriber organisation.
Pharmacy Registration	This critical capability covers the functions needed to register a dispenser organisation, typically but not restricted to community pharmacies, to use DPDP services.
Amend Pharmacy Details	This capability covers the functions needed to maintain the details for a pharmacy organisation.
Technical Registration	This capability covers the functions needed to add and change the technical information needed to correctly distribute prescriptions from and to nominated systems.
Information Distribution	Information Distribution covers the capabilities for the sending, retrieving and reception of asynchronous data, typically but not exclusively as batched sets of information.
Retrieve Information	This critical capability covers the functions needed to retrieve or receive data from supplying systems and services.
Send Information	This critical capability covers the functions needed to send data to consuming systems and services.
Configure Information	This critical capability covers the functions needed to configure information sending and retrieval, such as batches.
Service Support	Service Support covers the capabilities for managing and supporting the DPDP service in a production setting. <i>Further sub-capabilities will be included as part of the ongoing business analysis activities.</i>

Capability Maps – Level 3 Capabilities

The following capability maps show the lowest level (ie, most detailed) view of the DPDP capabilities. The accompanying tables provide descriptions of those capabilities only.

Capability Map – Prescribing Capabilities Detailed View

The following diagram shows the detailed view of prescribing and related capabilities. There are several third-level capabilities within the map that highlight specific critical functions of the overall organisation. Key links between capabilities are also shown to highlight specific dependencies.



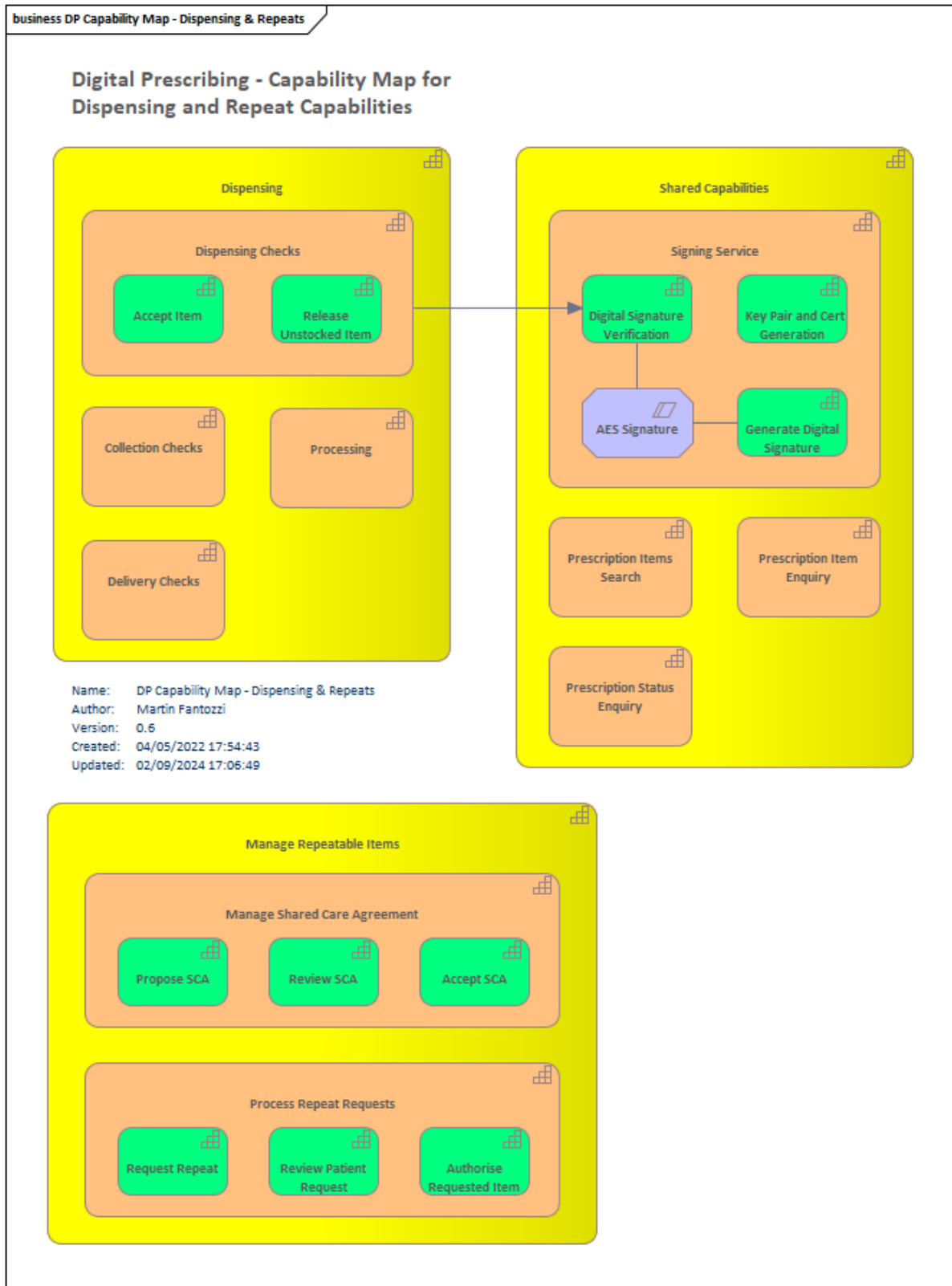
Capabilities Descriptions

Refer to the [Capability Map – Level 1 and Level 2 Capabilities](#) map for descriptions of the first and second level capabilities.

Capability	Sub-capability	
Prescription Management		
Create Prescription	Create Item	This capability covers the functions needed to create and amend an individual prescription item.
	Add Prescription Details	This capability covers the functions needed to add prescription level information: prescriber; patient info; surgery/location.
	Sign Prescription	This capability covers the functions needed for a prescriber to electronically sign a prescription item. It is linked to the Generate Digital Signature capability.
Change Prescription	Update Prescription Status	This capability covers the function needed to update the current status of a prescription, eg, from 'dispensed' to 'collected'.
	Amend Prescription	This capability covers the functions needed to update prescription level information.
	Amend Prescription Item	This capability covers the functions needed to update or annotate a prescription item.
	Cancel Prescription	This capability covers the function needed to cancel a live prescription or item.
Shared Capabilities		
Signing Service	Generate Digital Signature	This capability covers the functions needed to securely generate a digital signature that is unique to the prescriber and prescription.
	Digital Signature Verification	This capability covers the functions needed to verify that an AES digital signature is valid and matches both the prescription and prescriber.
	AES Signature	This constraint covers the need for linked capabilities to create and verify that a digital signature is an AES signature.
	Key Pair and Cert Generation	This capability covers the functions needed to generate key pairs and an appropriate certificate for a prescriber to allow generation and verification of secure AES digital signatures.

Capability Map – Dispensing and Repeated Item Capabilities Detailed View

The following diagram shows the detailed view of dispensing, repeated items and related capabilities. There are several third-level capabilities within the map that highlight specific critical functions of the overall organisation. Key links between capabilities are also shown to highlight specific dependencies.



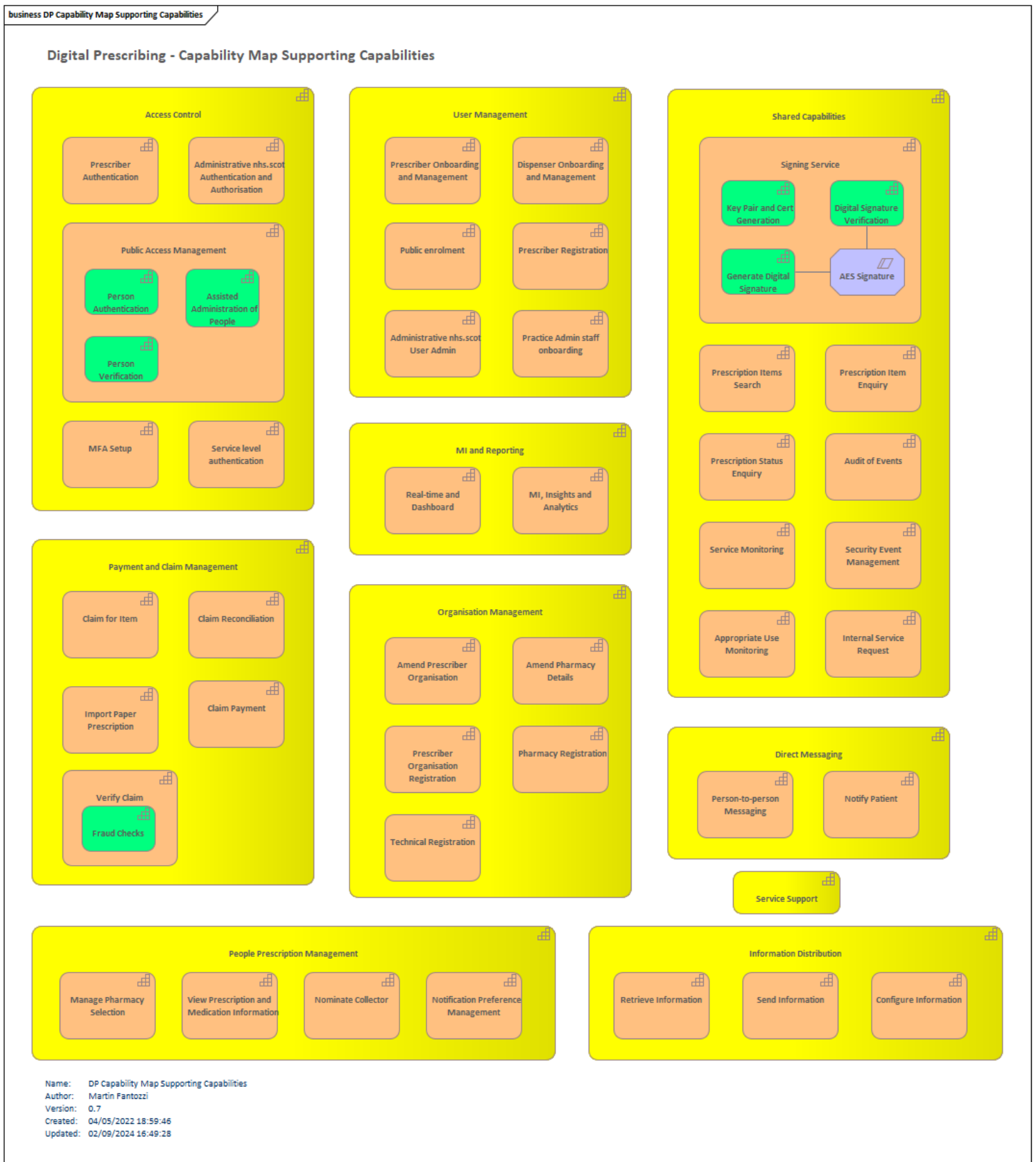
Capabilities Descriptions

Refer to the [Capability Map – Level 1 and Level 2 Capabilities](#) map for descriptions of the first and second level capabilities and to the [Capability Map – Prescribing Capabilities Detailed View](#) for previously defined detailed items.

Capability	Sub-capability	
Dispensing		
Dispensing Checks	Accept Item	This capability covers the functions needed to accept an item as being both in stock and passed all other dispensing checks.
	Release Unstocked Item	This capability covers the functions needed to return an out-of-stock item to the central DPDP service so that the item can be fulfilled at another pharmacy.
Manage Repeatable Items		
Manage Shared Care Agreement	Propose SCA	This capability covers the functions needed to create and send a proposed SCA for a serial prescription.
	Review SCA	This capability covers the functions needed to access and review a proposed SCA for a serial prescription.
	Accept SCA	This capability covers the functions needed to agree a proposed SCA for a serial prescription.
Process Repeat Requests	Request Repeat	This capability covers the functions needed to request a repeatable medication item.
	Review Patient Request	This capability covers the functions needed to review a request made by a patient for a repeatable medication item.
	Authorise Requested Items	This capability covers the functions needed to authorise a request made by a patient for a repeatable medication item.

Capability Map – Supporting Capabilities Detailed View

The following diagram shows the detailed view of supporting capabilities. There are several third-level capabilities within the map that highlight specific critical functions of the overall organisation.



Capabilities Descriptions

Refer to the [Capability Map – Level 1 and Level 2 Capabilities](#) map for descriptions of the first and second level capabilities and to the [Capability Map – Prescribing Capabilities Detailed View](#) for previously defined detailed items.

Capability	Description	
Access Control		
Public Access Management	Person Authentication	This capability covers the functions needed to allow people to authenticate themselves as users of the public-facing aspects of the DPDP service.
	Person Verification	This capability covers the functions needed to allow people to verify their identity to allow them to enrol as users of the public-facing aspects of the DPDP service.
	Assisted Administration of People	This capability covers the functions needed to allow NSS to assist in verifying a person's identity to allow them to enrol as users of the public-facing aspects of the DPDP service.
Payment and Claim Management	<i>Note that some of these capabilities, as previously stated, are outwith the scope of DPDP</i>	
Verify Claim	Claim Reconciliation	This capability covers the functions needed to reconcile claims for dispensed items against prescribed items.
	Fraud Checks	This capability covers the functions needed to perform fraud checking for claims for dispensed items.
Organisation Management		
Pharmacy Registration	Technical Registration	This capability covers the functions needed to add and change the technical information needed to correctly distribute prescriptions to nominated pharmacy's systems.

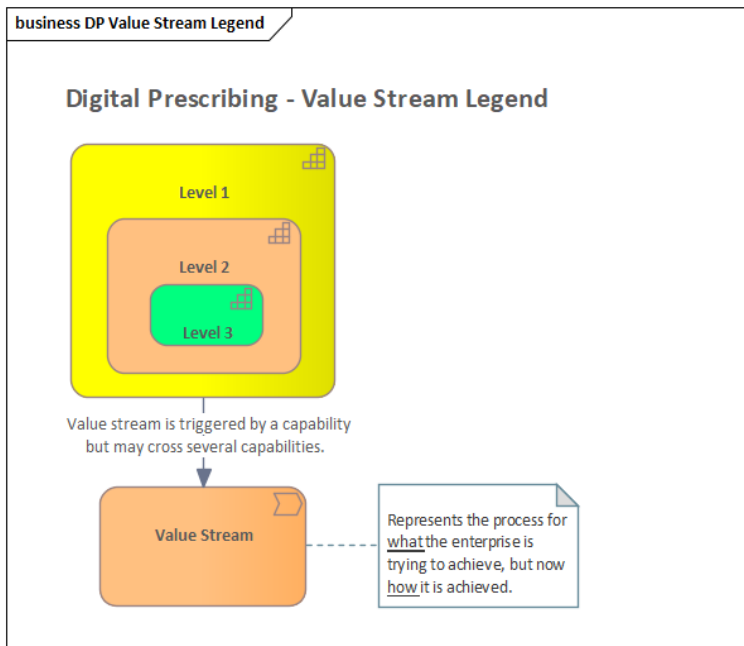
Value Streams

The value streams represent the “what” aspect of the processes undertaken by an organisation. From the Archimate definition (based on TOGAF) in [5] “A value stream describes how an enterprise organizes its activities to create value. ... Value streams are different from business processes. The latter are concerned with the ‘how’, ..., whereas value streams are about the ‘what’”

The value streams are shown with their associated capabilities.

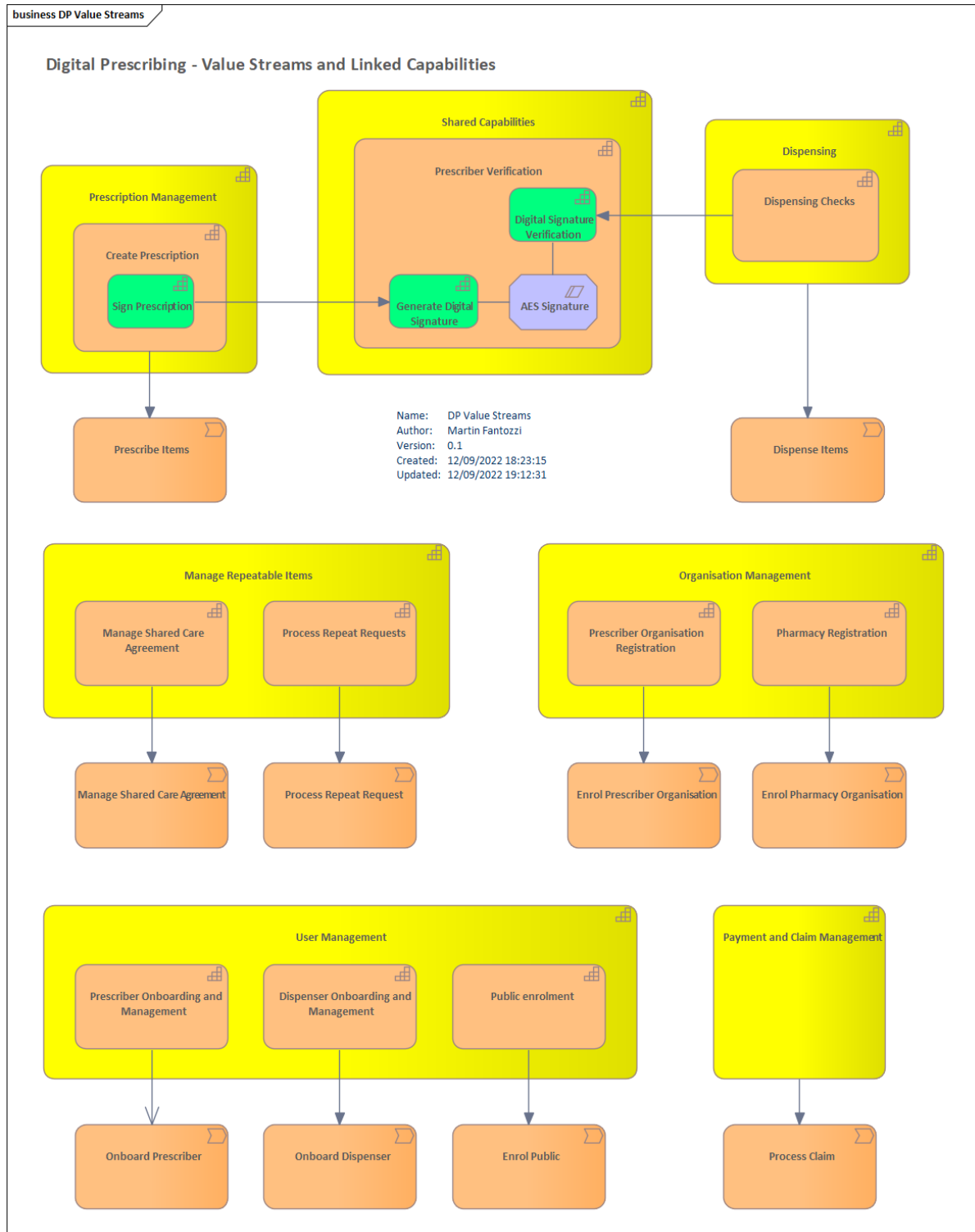
Value Streams Legend

This diagram provides the key items for the following value streams diagram.



Value Streams and Capabilities

The following diagram shows the significant value streams within the overall context of DPDP and the capabilities with which they are associated. These will be realised. There is no further breakdown of the value streams within this business architecture description to avoid duplicating the existing business analysis effort.



Value Stream Descriptions

Refer to the [Capability Map – Level 1 and Level 2 Capabilities](#) map for descriptions of the first and second level capabilities referenced in the above diagram.

Value Stream	Description
Prescribe Items	This value stream covers the process of creating a prescription, adding items and signing those items for dispensers to fulfil for a patient.
Dispense Items	This value stream covers the process of reviewing a prescription and its items then dispensing and handing over that prescription to a patient.
Manage Shared Care Agreement	This value stream covers the process of proposing, reviewing and reporting on shared care agreements for patients' serial prescriptions.
Process Repeat Request	This value stream covers the process requesting repeatable medication items, reviewing that request and dispensing the items for a patient.
Enrol Prescriber Organisation	This value stream covers the process for enrolling an organisation that employs prescribers, such as a GP practice.
Enrol Pharmacy Organisation	This value stream covers the process for enrolling an organisation that employs dispensers, such as a community pharmacy.
Onboard Prescriber	This value stream covers the process for verifying a prescriber and their right to prescribe, adding them to a central register, and setting up appropriate authentication and authorisation for that prescriber.
Onboard Dispenser	This value stream covers the process for verifying a dispenser and their right to dispense, and setting up appropriate authentication and authorisation for that dispenser.
Enrol Public	This value stream covers the process for identifying and verifying a member of public, and setting up appropriate authentication and authorisation for them to access their own medical and prescription-related information.
Process Claim	This value stream covers the process for a CP making a claim for payment, then PSD checking and paying that claim.

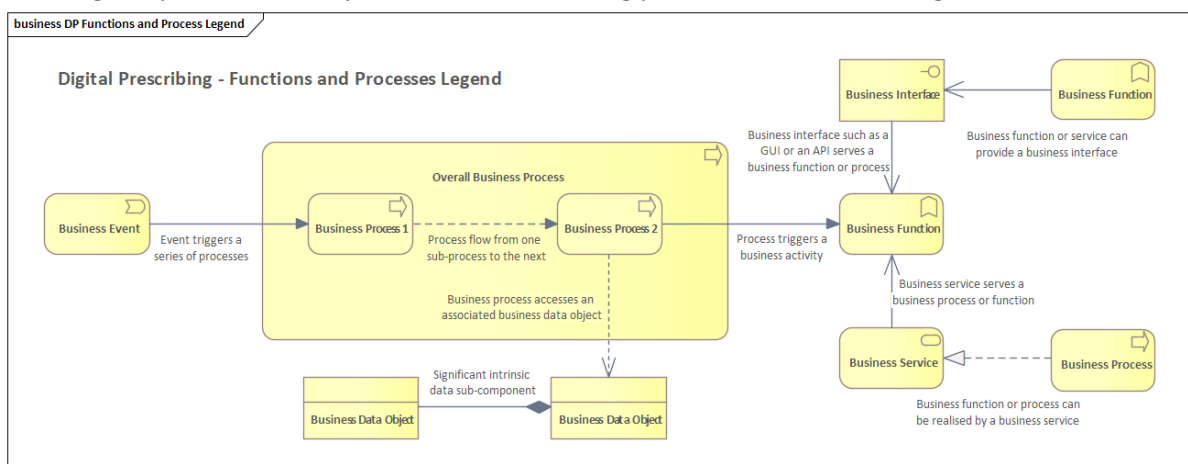
Processes and Functions

The following section outlines the business processes and functions based on the service design work, process maps, user stories and detailed business analysis work. These are not intended to duplicate the business analysis work and are at a higher and more abstract level than the business process maps produced by the business analysis activities. Their function within the context of the overall solution architecture is to link the capabilities and value streams to the solution architecture itself, showing first the processes and functions, then how they realise those capabilities and value streams.

The solution architecture section later in this document shows the components and services that realise the processes and functions.

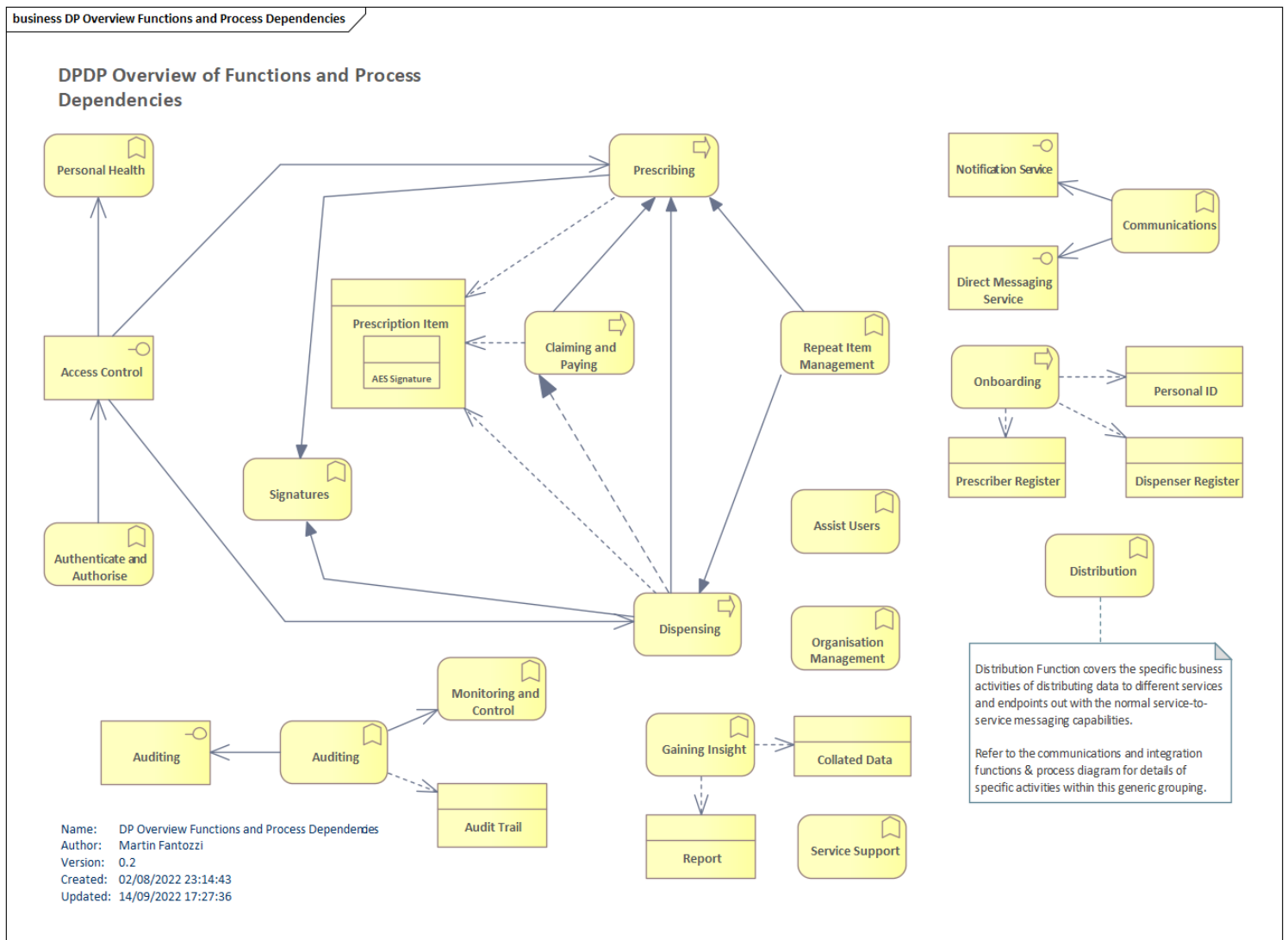
Process and Function Legend

This diagram provides the key items for the following process and function diagrams



Function, Process and Data Item Dependencies

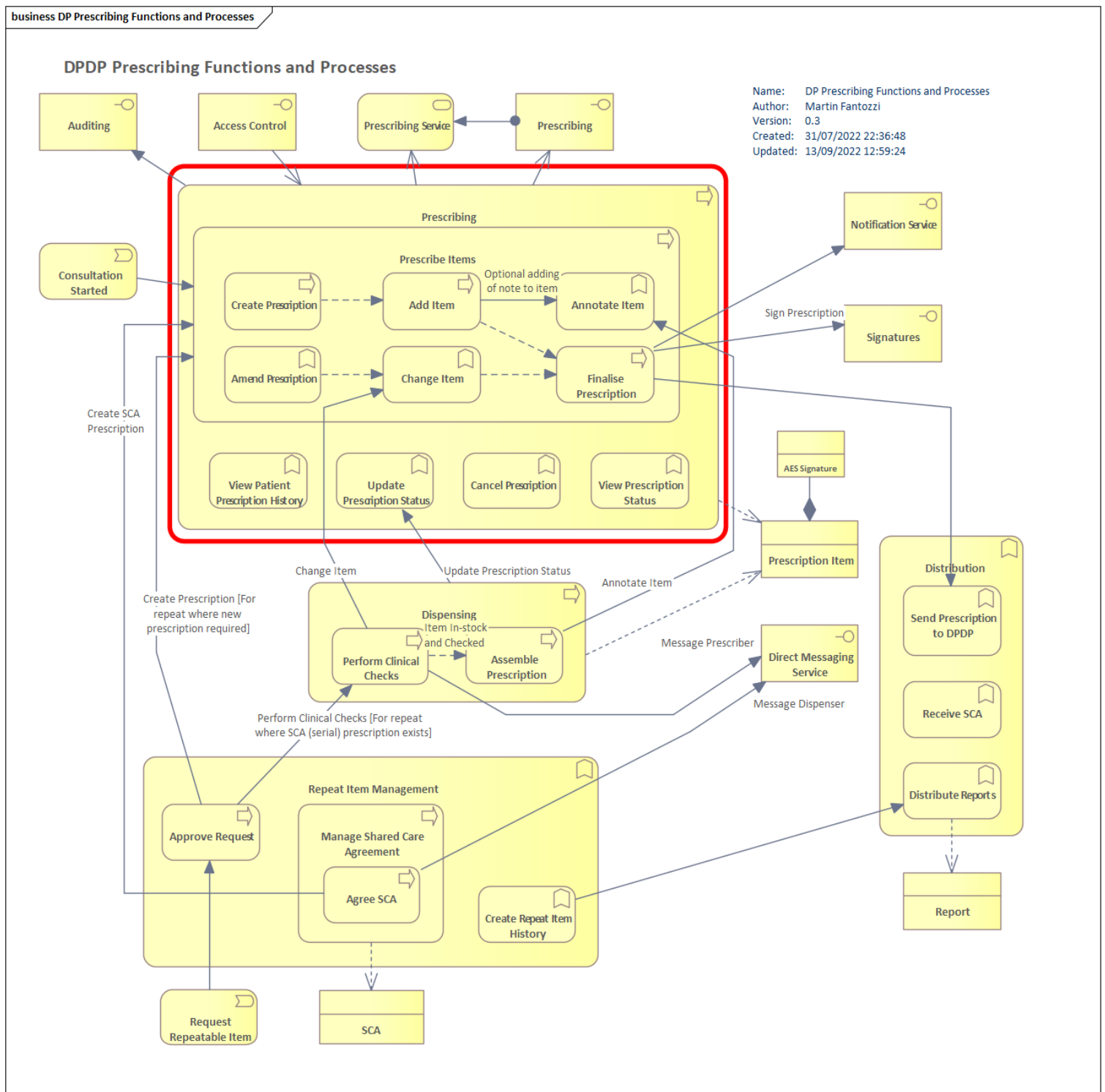
The following diagram shows the inter-dependencies between the business processes, functions and high-level conceptual data items within the DPDP domain.



Prescribing Functions and Processes

The prescribing functions and processes show the controlling business process for prescribing items, including nested business processes, within the red-bordered scoping area.

The overall diagram also shows the process context in terms of supporting and supported processes and functions that are required to support the processes within scope for this section. Note that some of these may be out of scope for the MVP delivery.

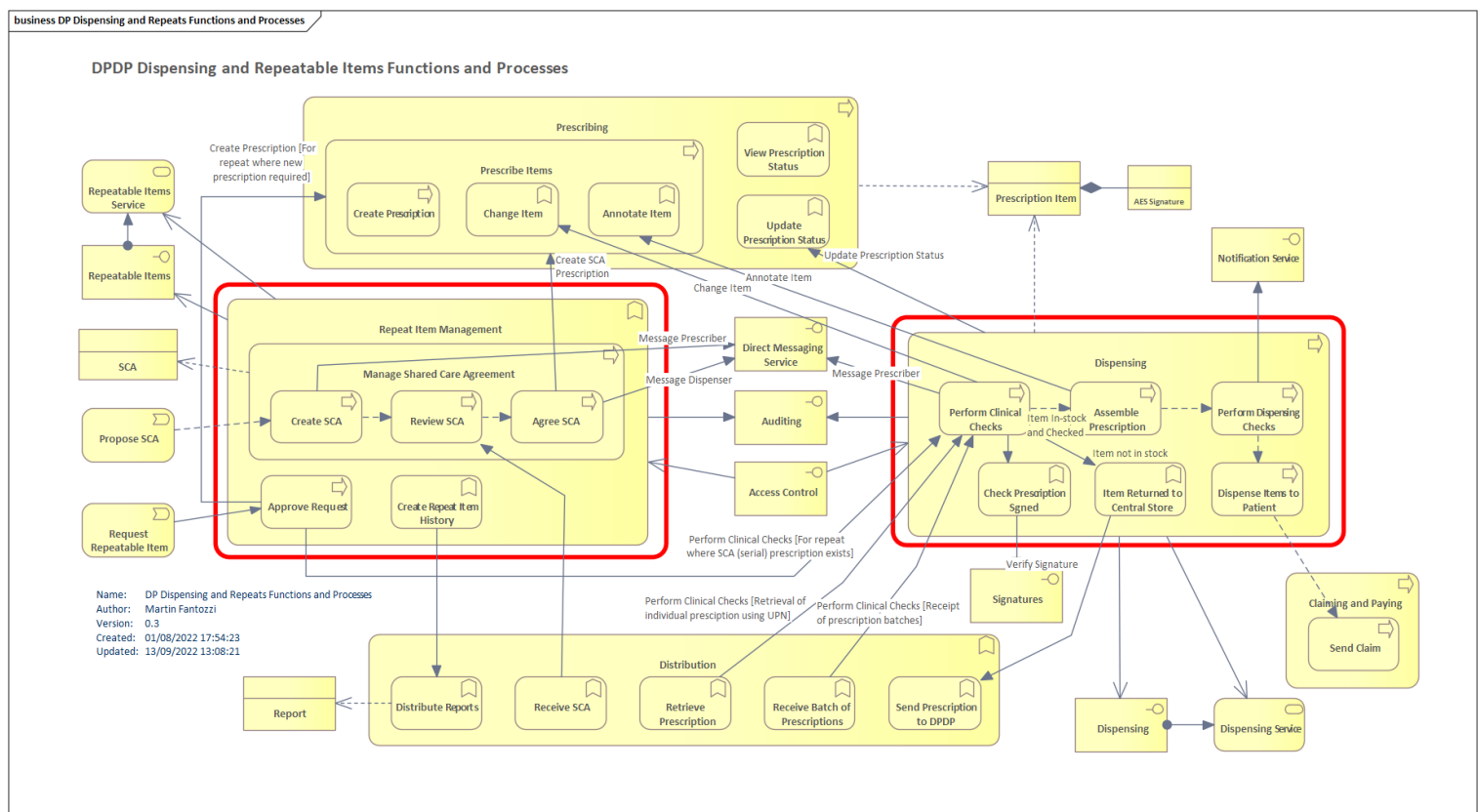


Dispensing and Repeatable Items Functions and Processes

The dispensing and repeatable items functions and processes show the controlling business process for dispensing items and managing requests for repeat item, including nested business processes, within the red-bordered scoping areas.

Much of the repeat item management is out of scope for MVP, particularly around the use of the shared care agreement, which is an integral aspect of serial prescribing.

The overall diagram also shows the process context in terms of supporting and supported processes and functions that are required to support the processes within scope for this section. Note that some of these may be out of scope for the MVP delivery.

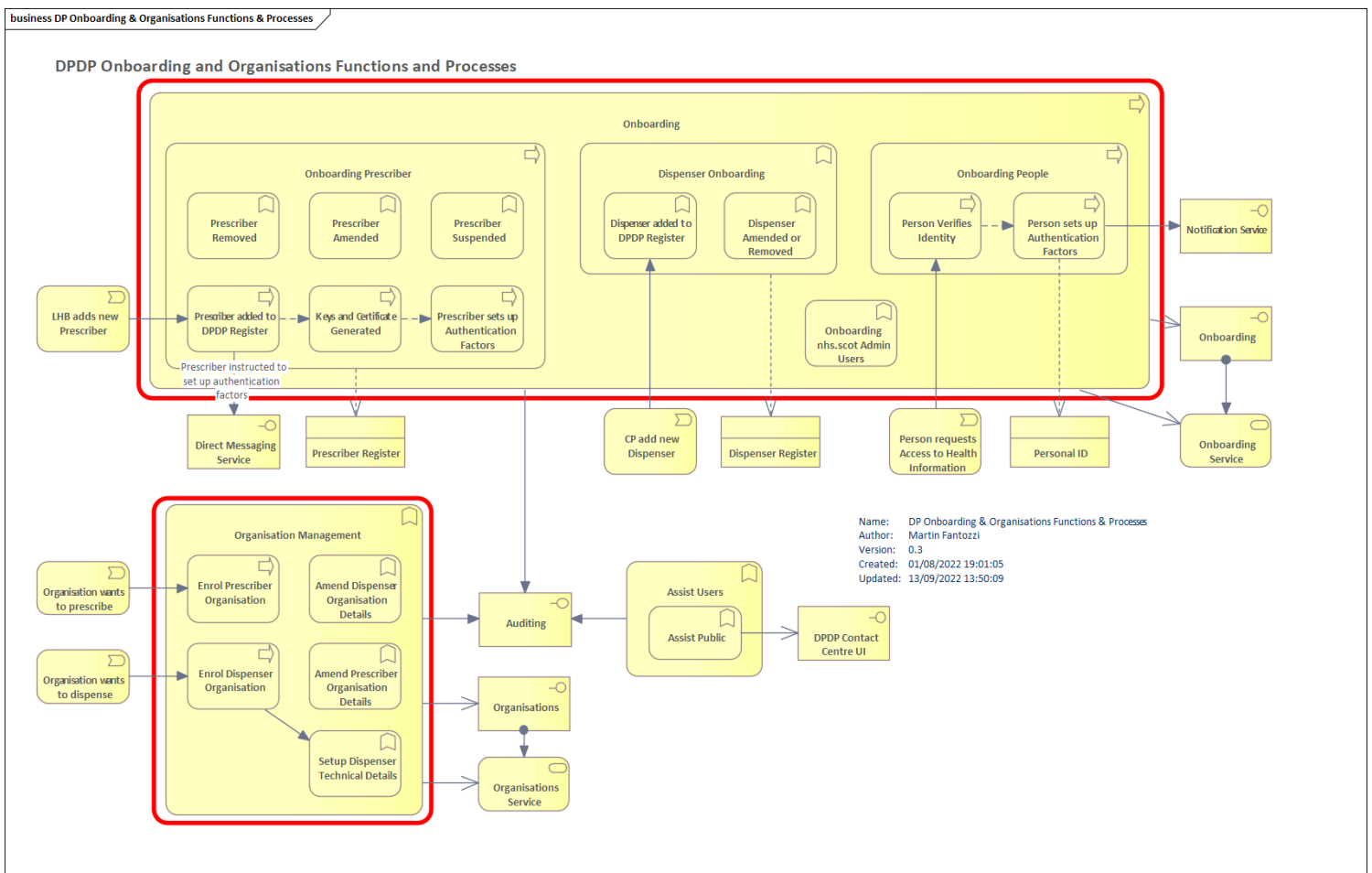


Onboarding and Organisations Functions and Processes

The functions and processes for onboarding users and organisations show the controlling business process for both organisation management and the onboarding of individuals within DPDP, including nested business processes, within the red-bordered scoping areas.

The process for onboarding people is intended for members of the public and is out of scope for MVP.

The overall diagram also shows the process context in terms of supporting and supported processes and functions that are required to support the processes within scope for this section. Note that some of these may be out of scope for the MVP delivery.

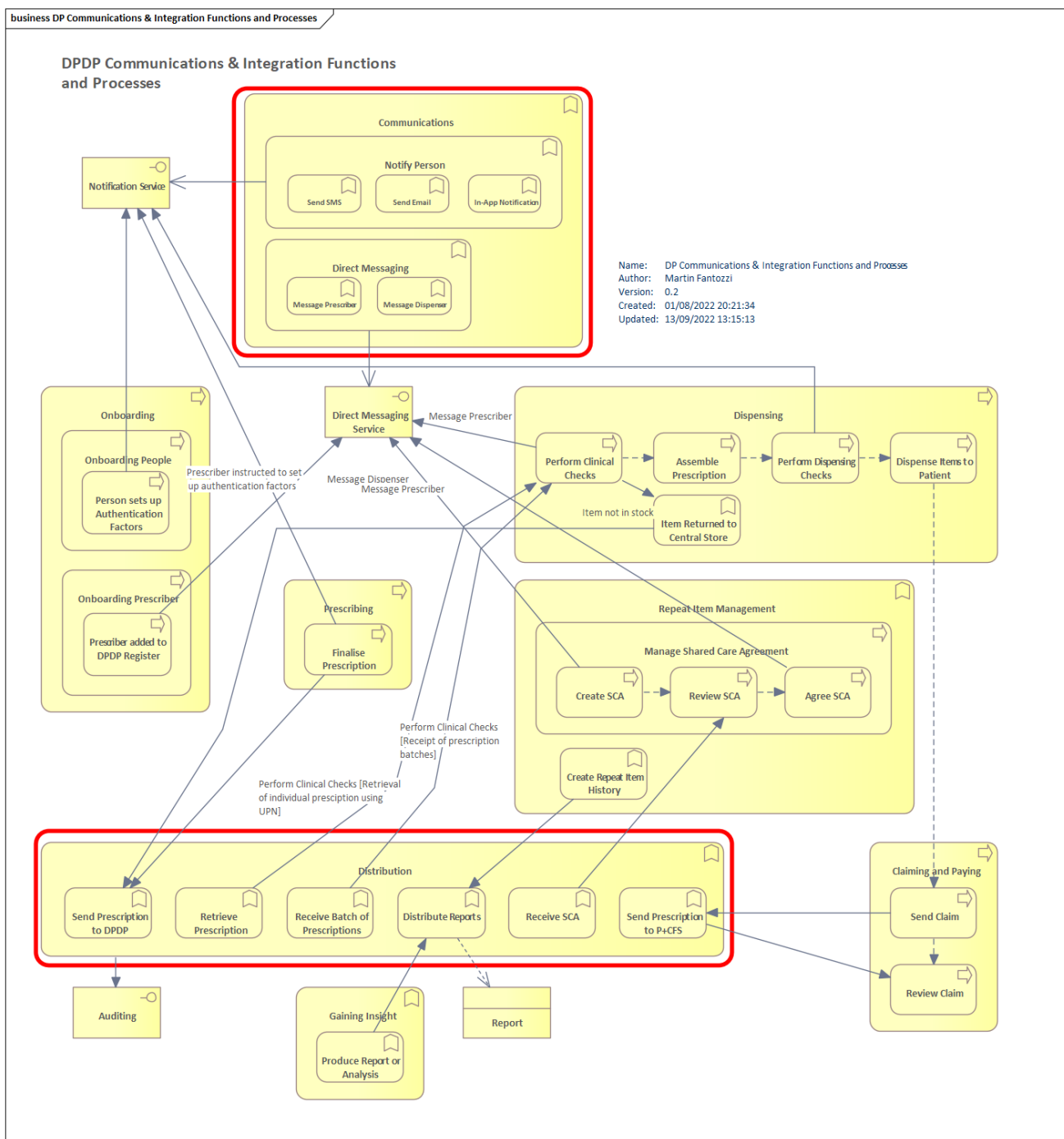


Communications and Integration Functions and Processes

The functions and processes for communications and distribution show the controlling business functions for communication between users, notifications to the public, and distribution of data artefacts of various types, including nested business processes, within the red-bordered scoping areas.

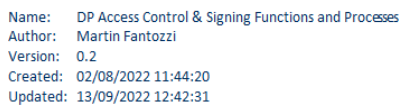
The communications function is out of scope for MVP, as are any distribution subfunctions other than the sending and receiving of prescription information.

The overall diagram also shows the process context in terms of supporting and supported processes and functions that are required to support the processes within scope for this section. Note that some of these may be out of scope for the MVP delivery.



The functions and processes for access control, AES signing and signature verification show the controlling business functions for authentication and authorisation and for signing and verification of prescription items, and distribution of data artefacts of various types, including nested business processes, within the red-bordered scoping areas.

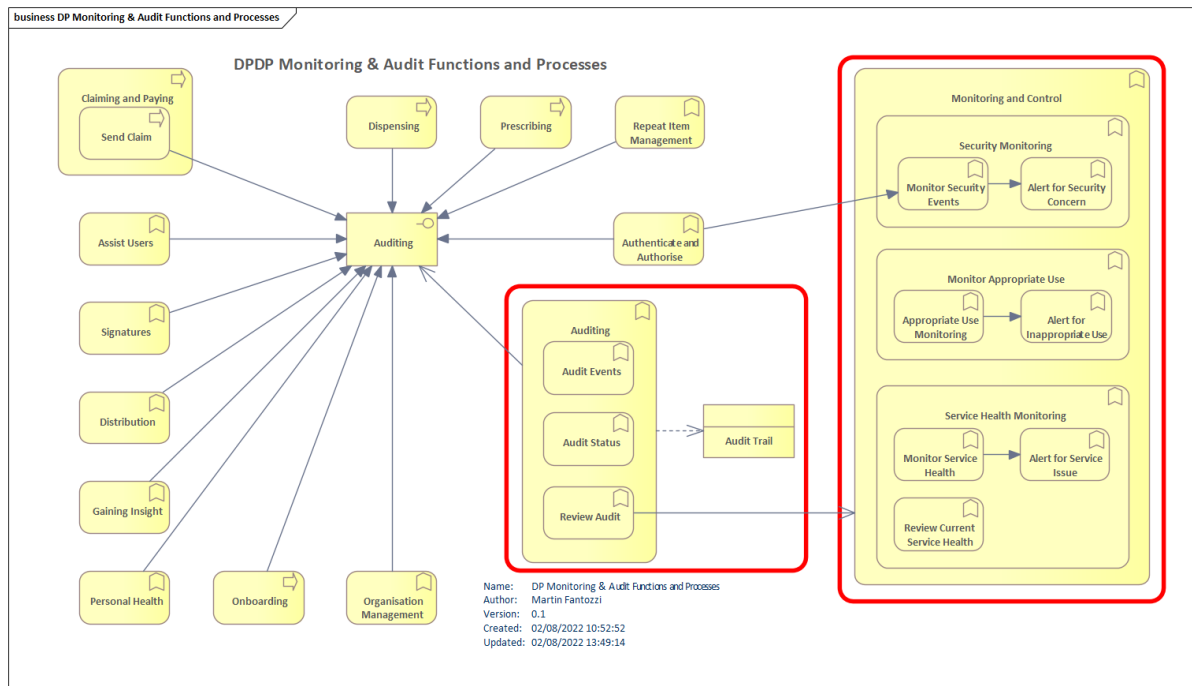
Control & Signing Functions and Processes



Monitoring and Audit Functions and Processes

The functions and processes for monitoring and audit show the controlling business functions for managing system health, monitoring SIEM events, ensuring appropriate access to sensitive health information, and auditing all other relevant DPDP activity, within the red-bordered scoping areas.

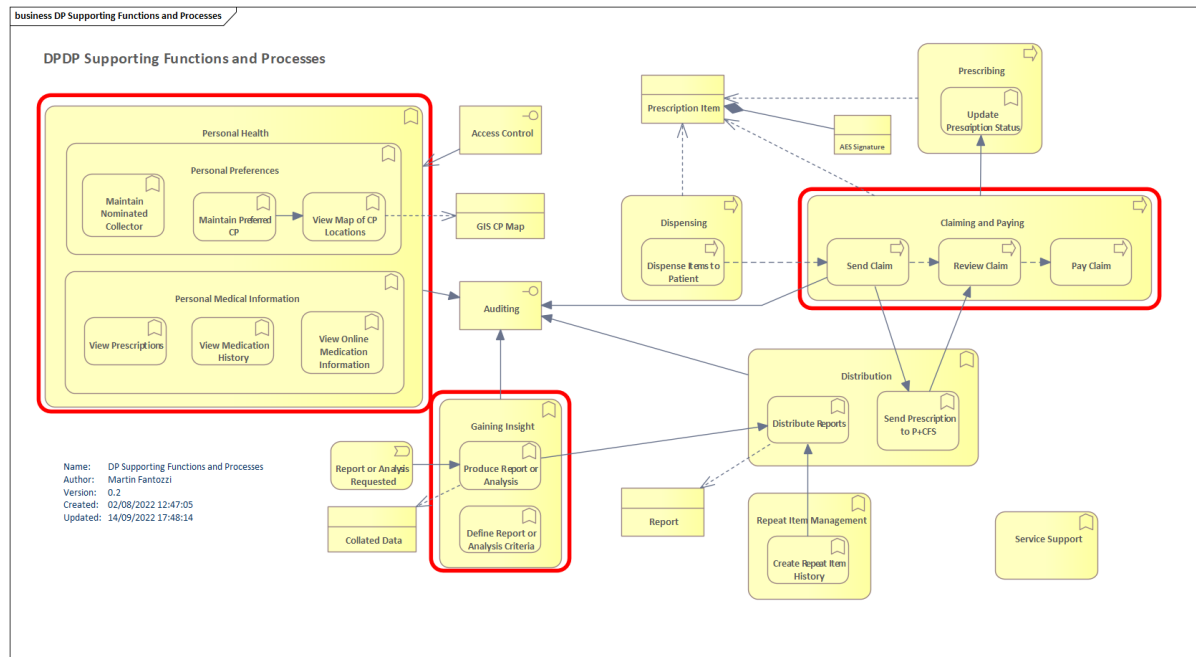
The overall diagram also shows the process context in terms of supporting and supported processes and functions that are required to support the processes within scope for this section. Note that some of these may be out of scope for the MVP delivery.



Supporting Functions and Processes

The functions and processes for monitoring and audit show the controlling business functions for managing system health, monitoring SIEM events, ensuring appropriate access to sensitive health information, and auditing all other relevant DPDP activity, within the red-bordered scoping areas.

The overall diagram also shows the process context in terms of supporting and supported processes and functions that are required to support the processes within scope for this section. Note that some of these may be out of scope for the MVP delivery.

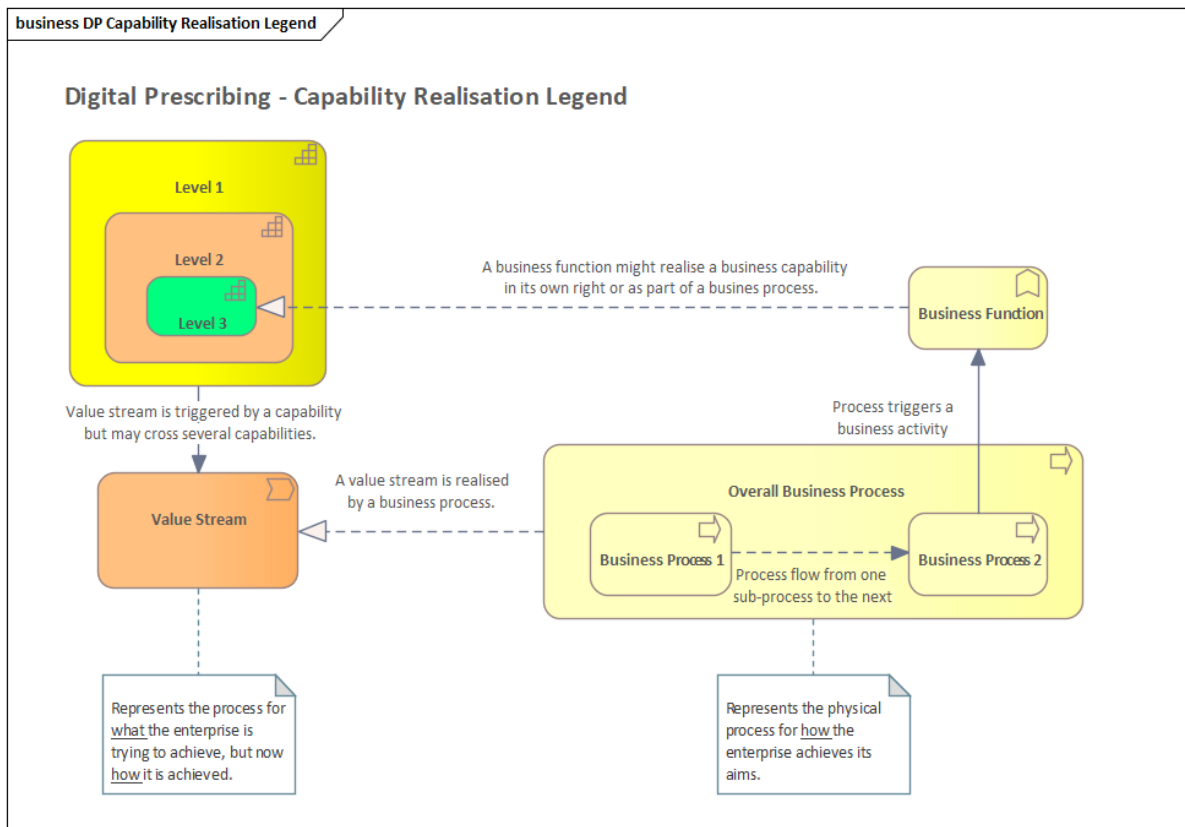


Processes and Functions Realisations – Mapping to Capabilities and Value Streams

The processes and functions are the detailed business implementations of the identified capabilities and value streams, and as such directly map to those artefacts. This provides the key link from the higher level view of what the enterprise needs to achieve its objectives and the individual business processes and lower level functions that must be in place for that to happen.

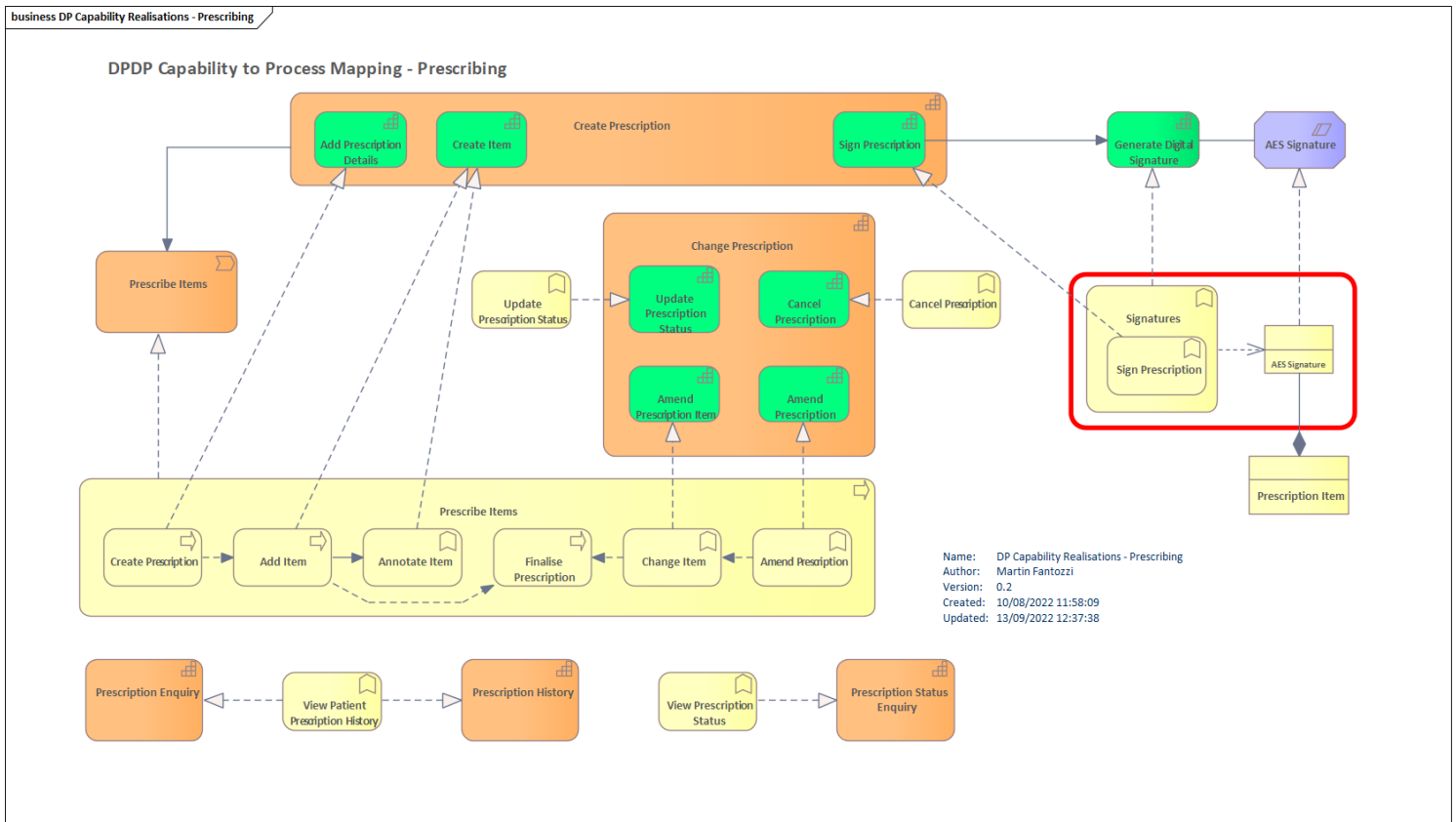
Capability Realisation and Function Mapping Legend

This diagram provides the key items for the following diagrams mapping the processes and functions to the capabilities and value streams.



Prescribing and Signing of Prescription Items

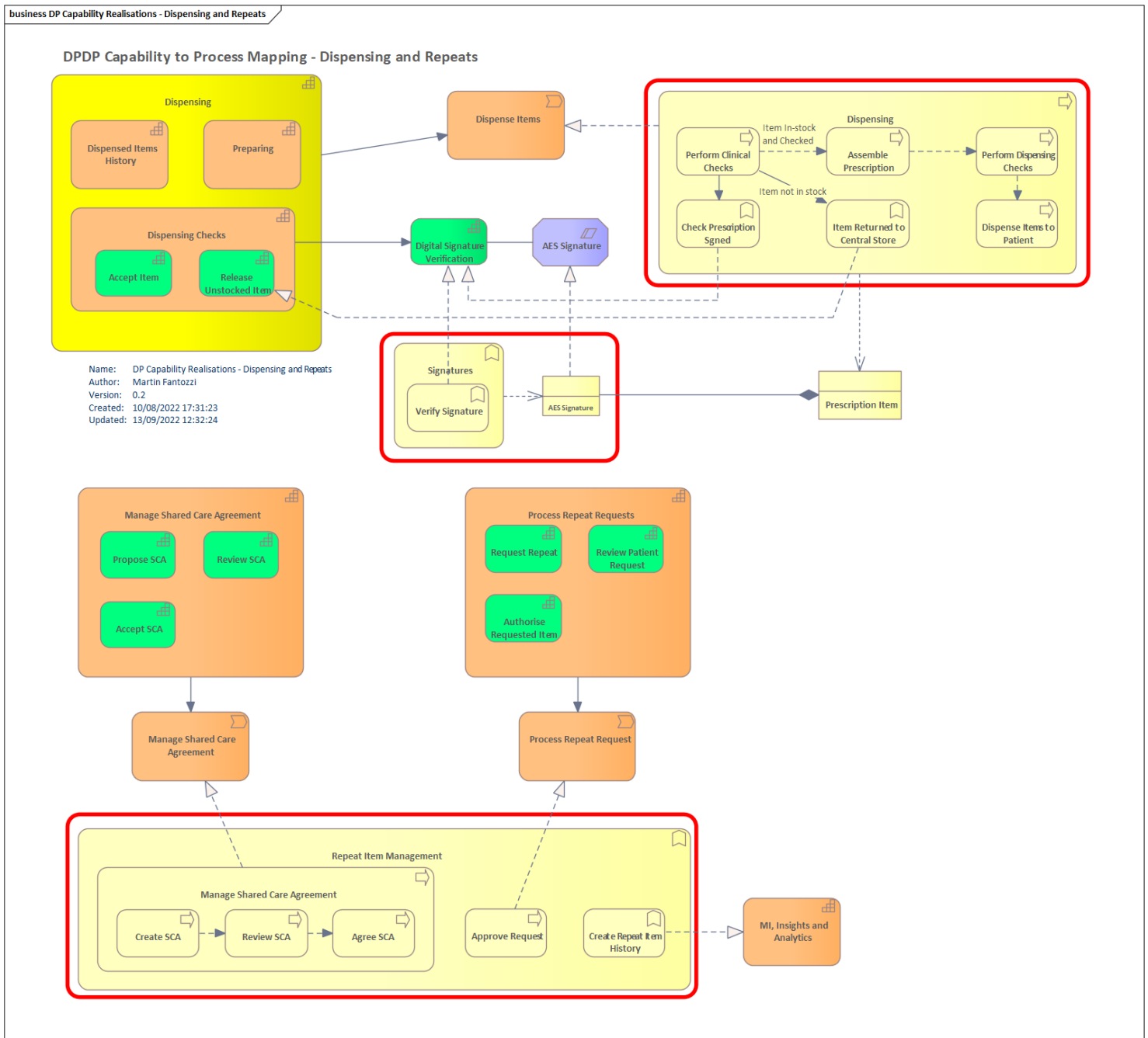
This mapping covers the capability and value stream mapping for the creation and signing of prescription items.



Dispensing, Signate Verification and Requests for Repeat Items

This mapping covers the capability and value stream mapping for the signature verification and item dispensing, as well as the request process for repeat items.

Note that the repeat processing is not the generation of repeat items within a prescribing system; it refers to the request process that drives the need to create a repeat item and is out of scope for the MVP release.

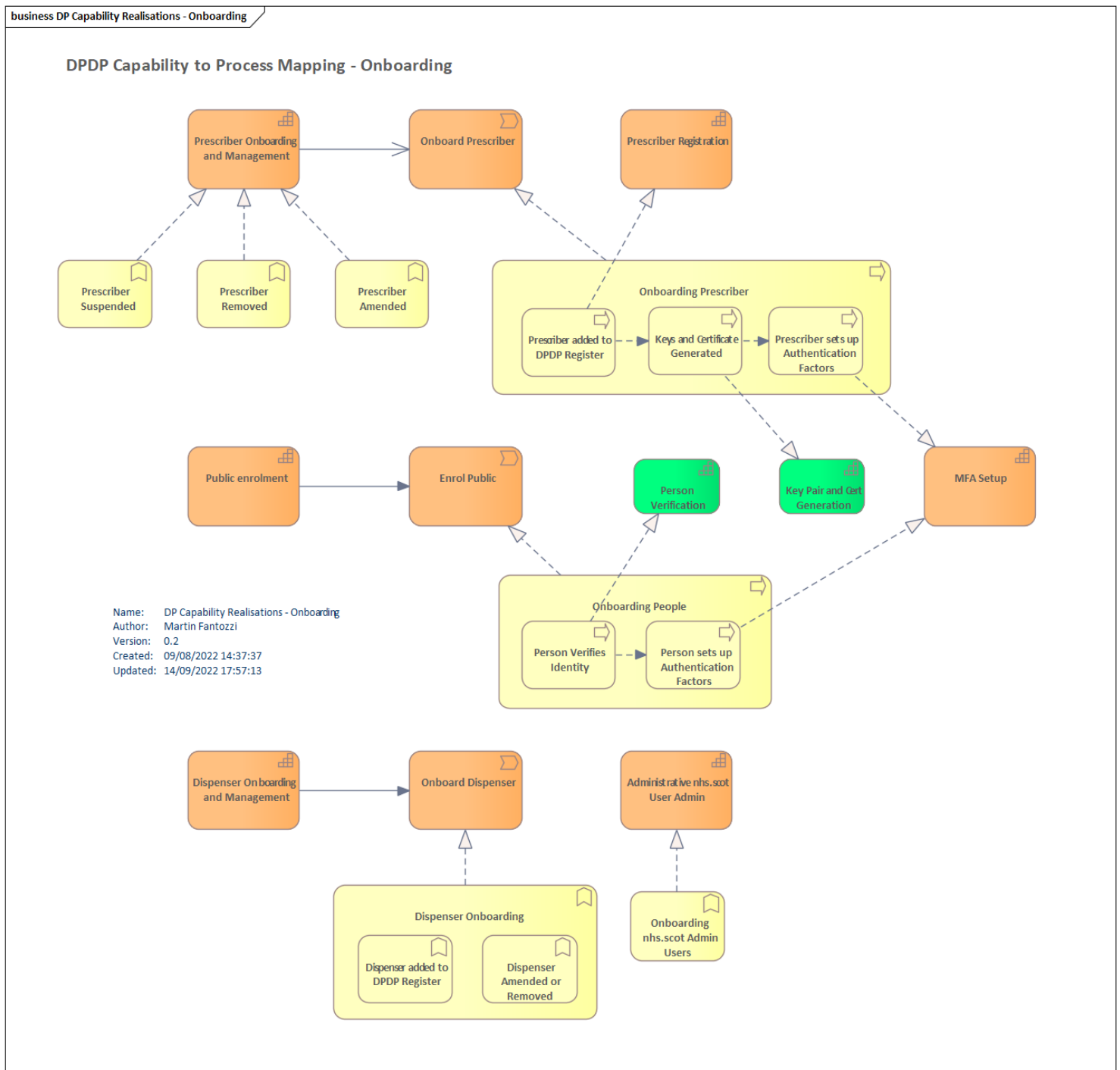


Onboarding

This mapping covers the capability and value stream mappings for both the onboarding of external users, specifically for prescribing, dispensing and the general public, and for organisations that will have access to the DPDP service outwith NHS Scotland.

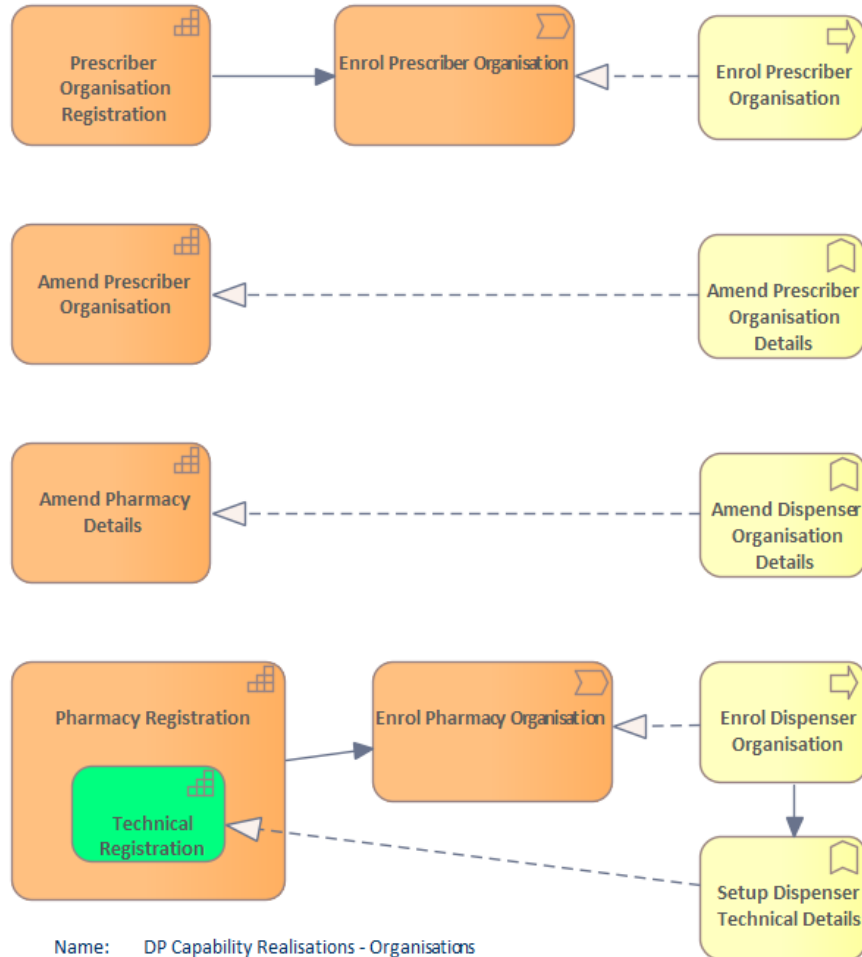
Note that the enrolment of the public users is out of scope for the MVP release.

Onboarding of External Users



business DP Capability Realisations - Organisations

DPDP Capability to Process Mapping - Organisations

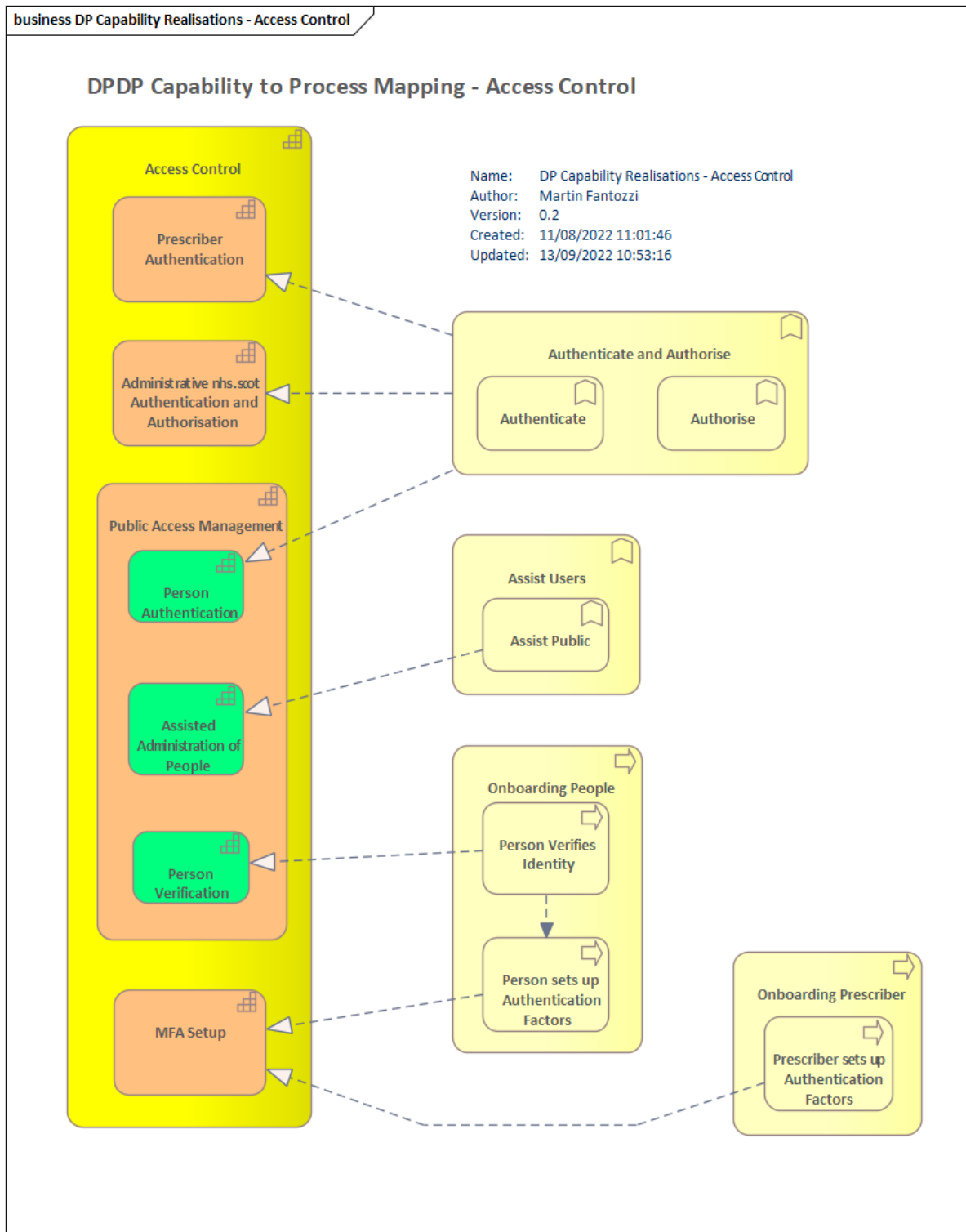


Name: DP Capability Realisations - Organisations
 Author: Martin Fantozzi
 Version: 0.2
 Created: 09/08/2022 18:51:30
 Updated: 13/09/2022 13:48:31

Access control

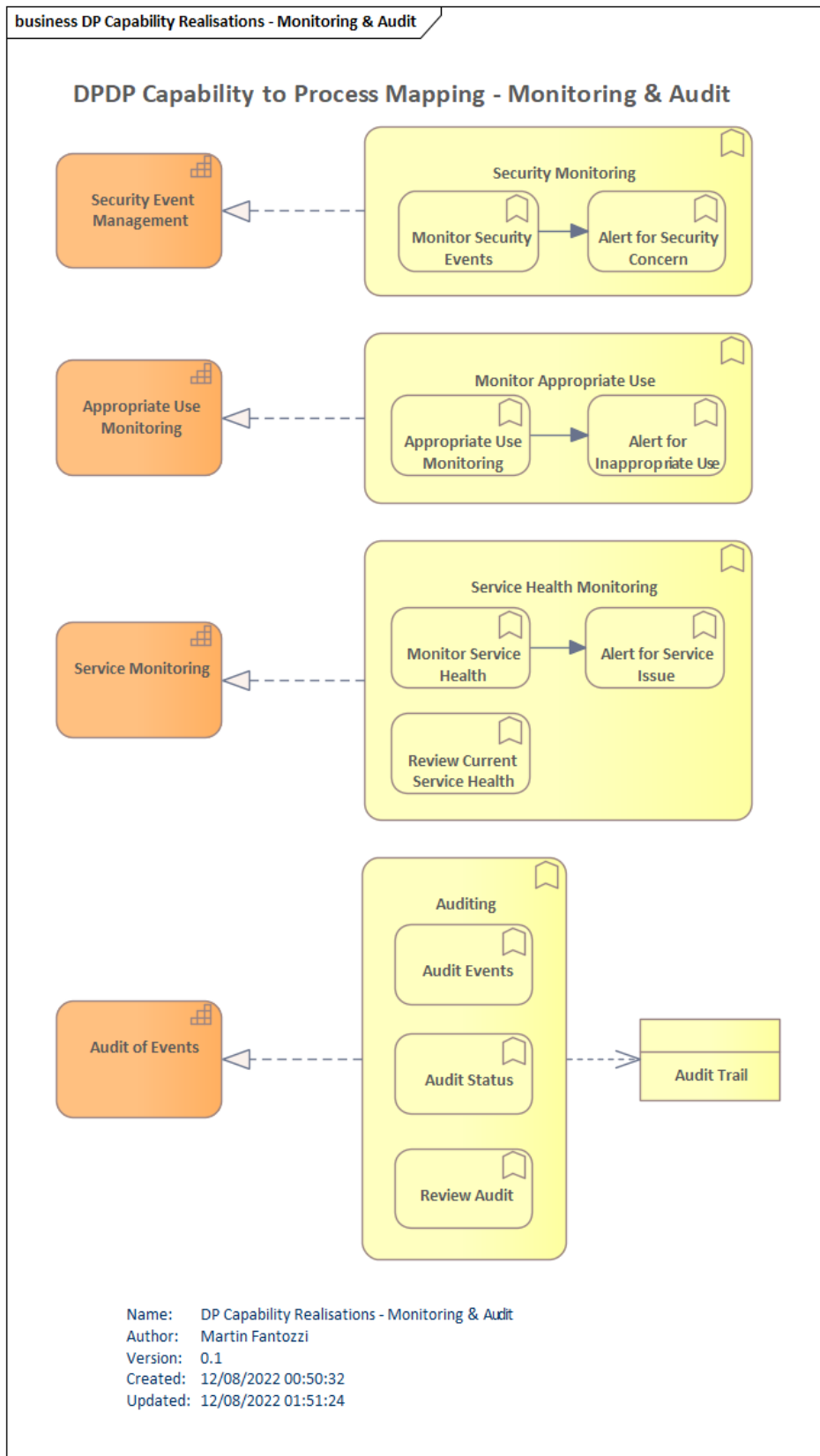
This mapping covers the capability and value stream mappings for the authentication and authorisation of users of the DPDP service.

Note that the enrolment of the public users via public access management is out of scope for the MVP release.



Monitoring and Audit

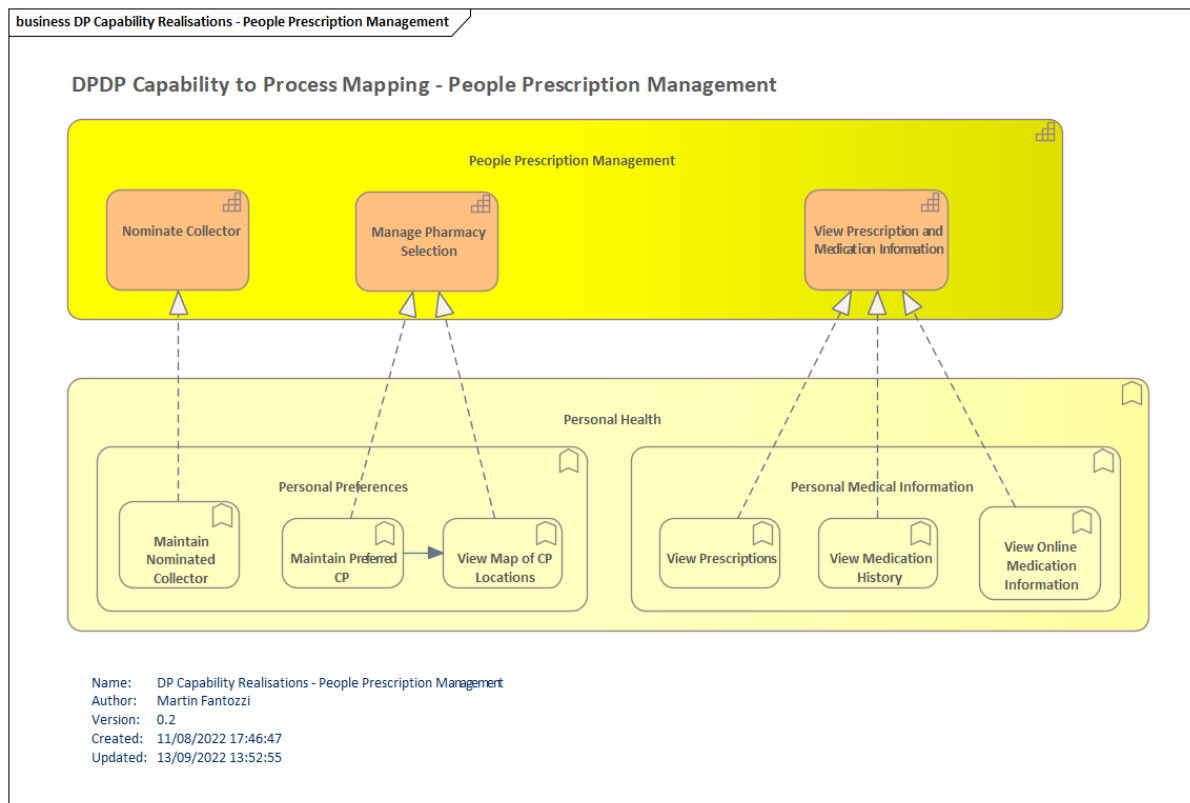
This mapping covers the capability and value stream mappings for the monitoring and audit services required to manage service health, security event monitoring and usage of the DPDP service.



People Prescription Management

This mapping covers the capability and value stream mappings for the proposed use of prescription and prescribing-related information within an NHS Scotland mobile app.

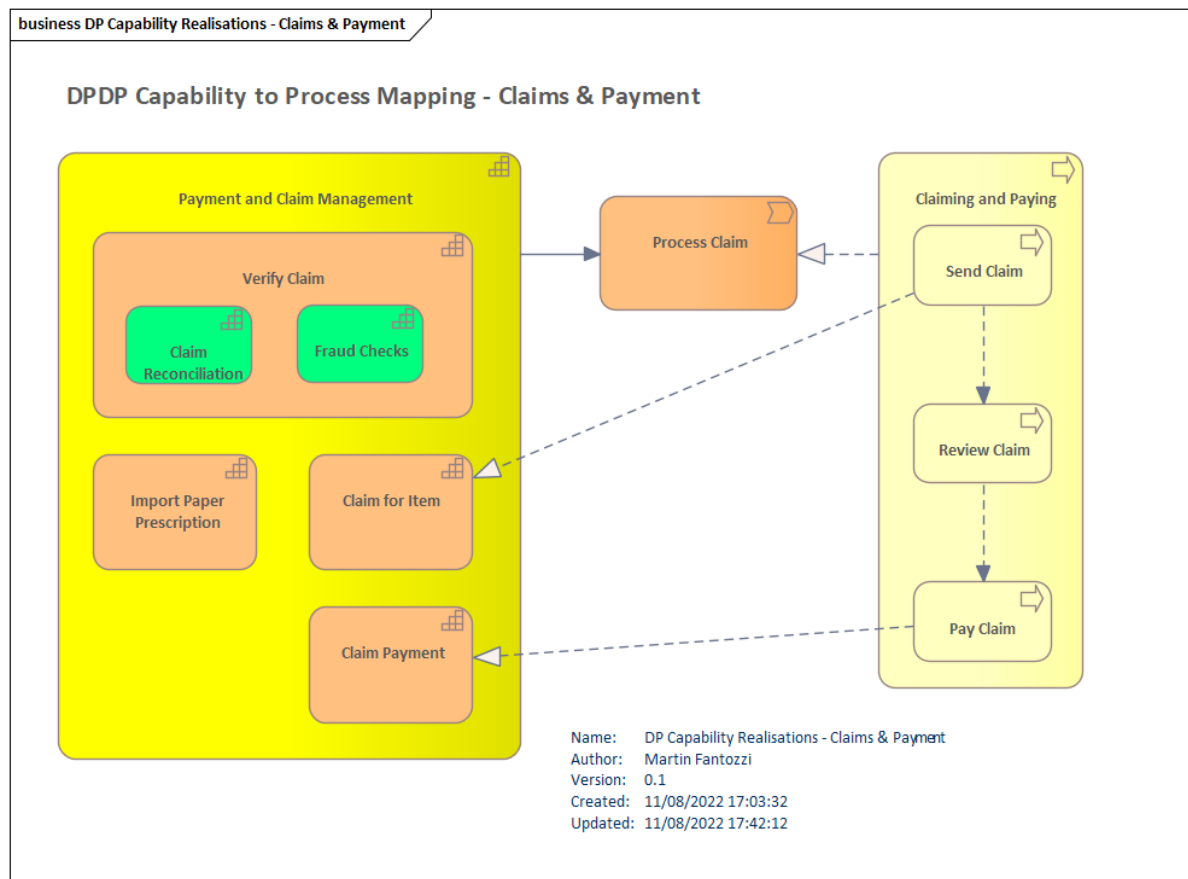
Note that the use of this information within an app is out of scope for the MVP release. It is probable that any mobile app requirement will be met by the Digital Front Door (DFD) initiative.



Claiming and Paying

This mapping covers the capability and value stream mappings for creating, verifying and payment of prescription-related claims by dispensing organisations.

The creation and submission of a claim is within the scope of DPDP, however the entirety of the claim processing beyond the initial reception and onward transmission of a claim is handled by the PSD team within NSS and is outwith DPDP.

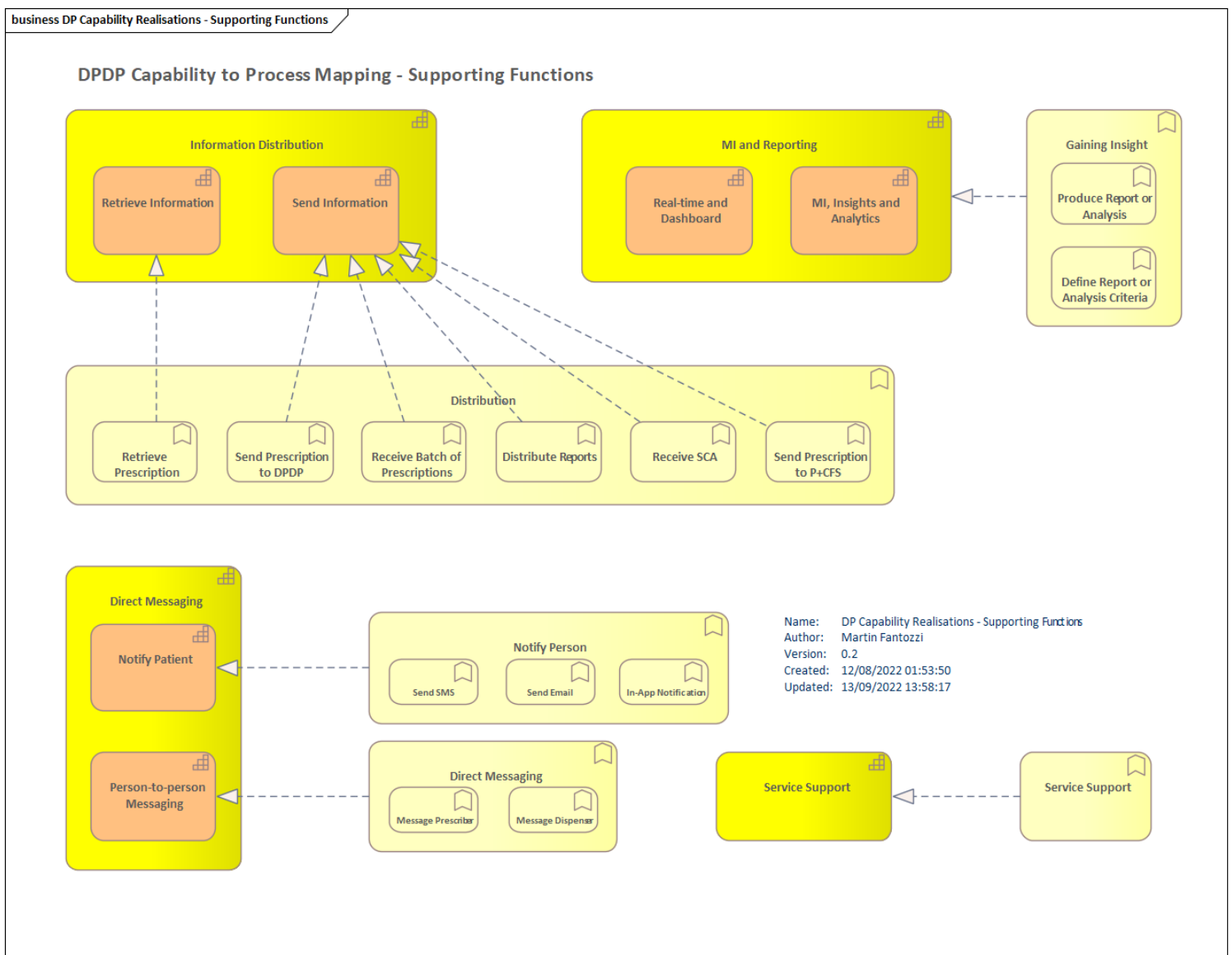


Integration, Communications, Support and Gaining Insight

This mapping covers the capability and value stream mappings for:

- integration of services and data;
- MI, analytics and dashboard (near real-time) reporting;
- Notifications to patients regarding prescribed item status;
- Direct messaging between users of the DPDP service, such as dispenser-to-prescriber;
- Data and report distribution.

Note that all MI and reporting, direct messaging, notifications and most of the distribution capabilities are out of scope for MVP. All integration and the sending / receiving of prescription capabilities is within scope for MVP.



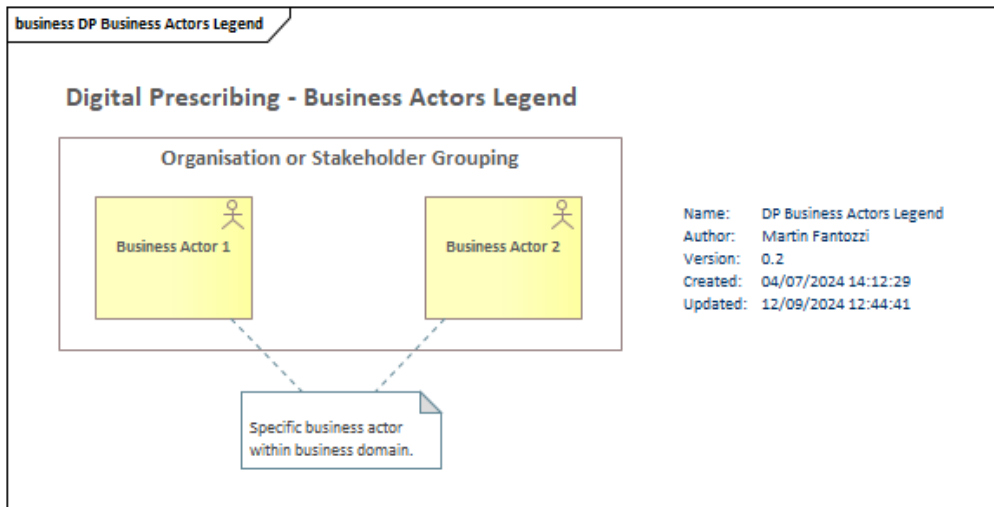
Actors and Roles

The business actors include those that are directly impacted by changes to the prescription service, those that will support and manage the service, the members of the public using the service, and the actors that use services which have a dependency on the prescribing service, such that disruption or changes to prescribing will impact their roles.

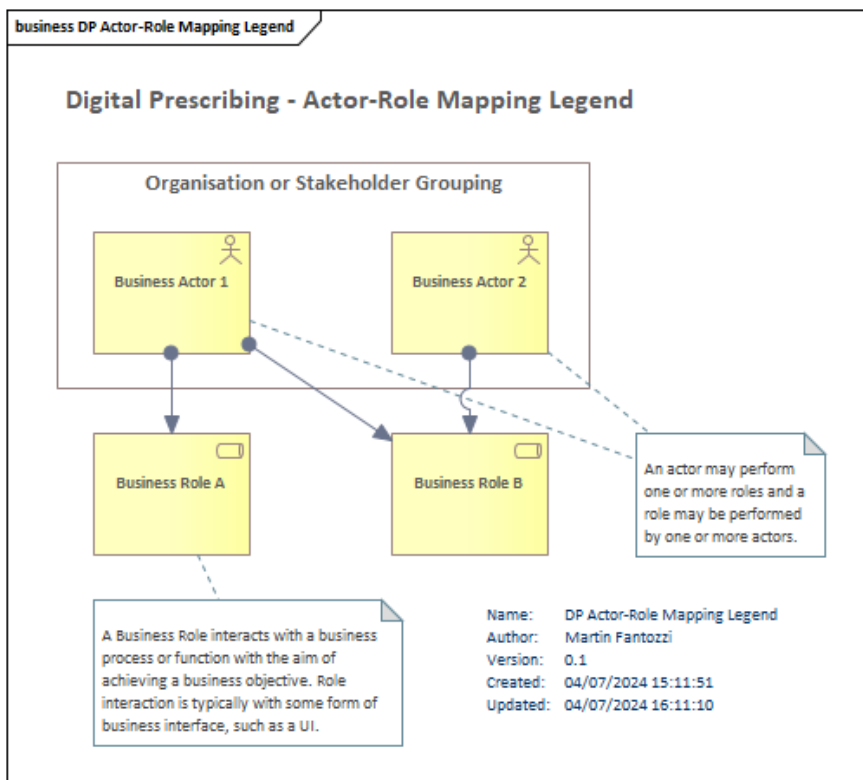
Actors and Roles Mapping Legend

The following diagrams provide the key items for the following actor and role maps.

Actor Legend

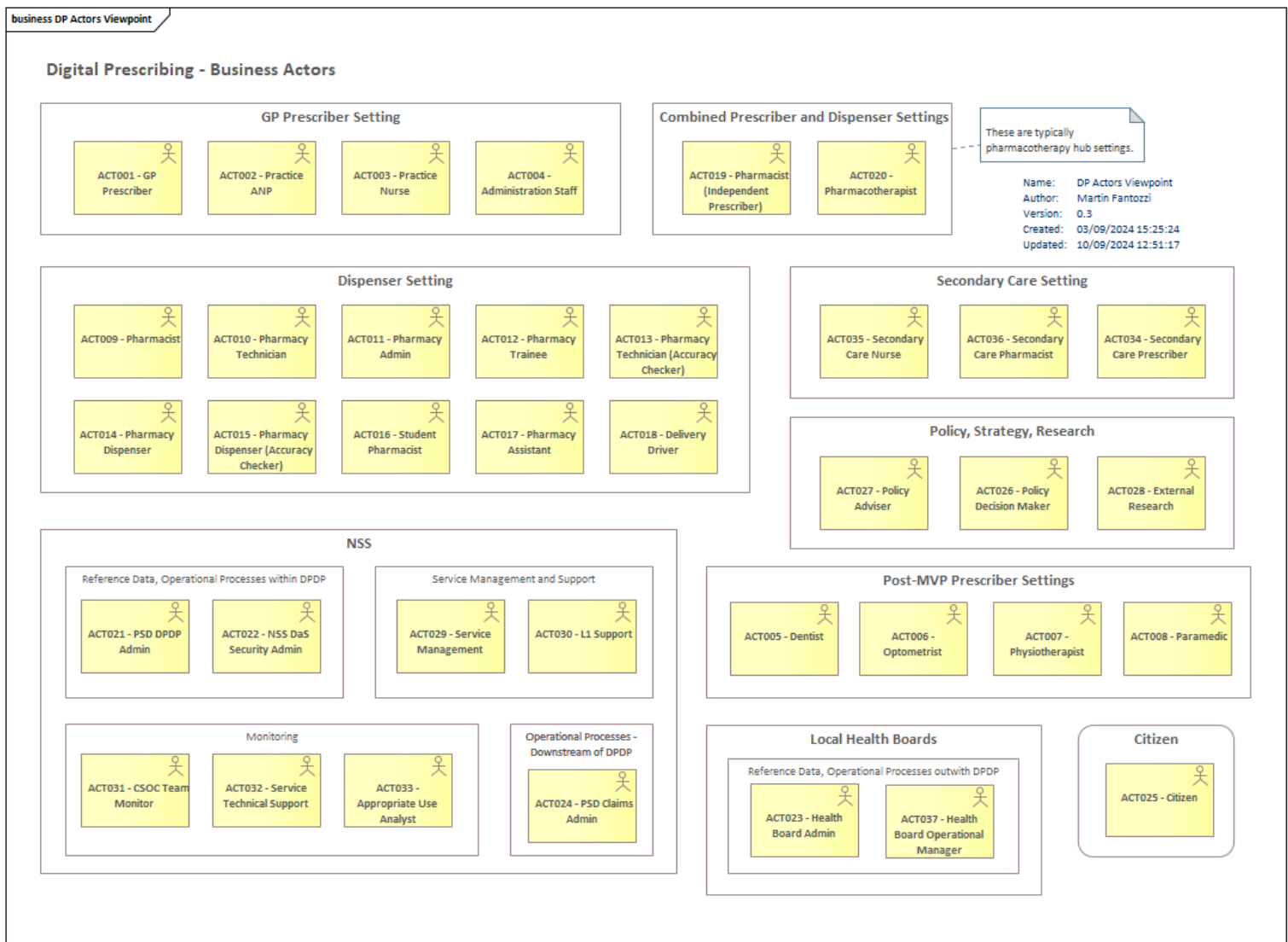


Actor-Role Mapping Legend



Actors

The following actors represent the known business actors within the DPDP domain. These are grouped into organisational and functional groupings as a simple way of classifying related actors and their roles.



Actors mapping to Roles

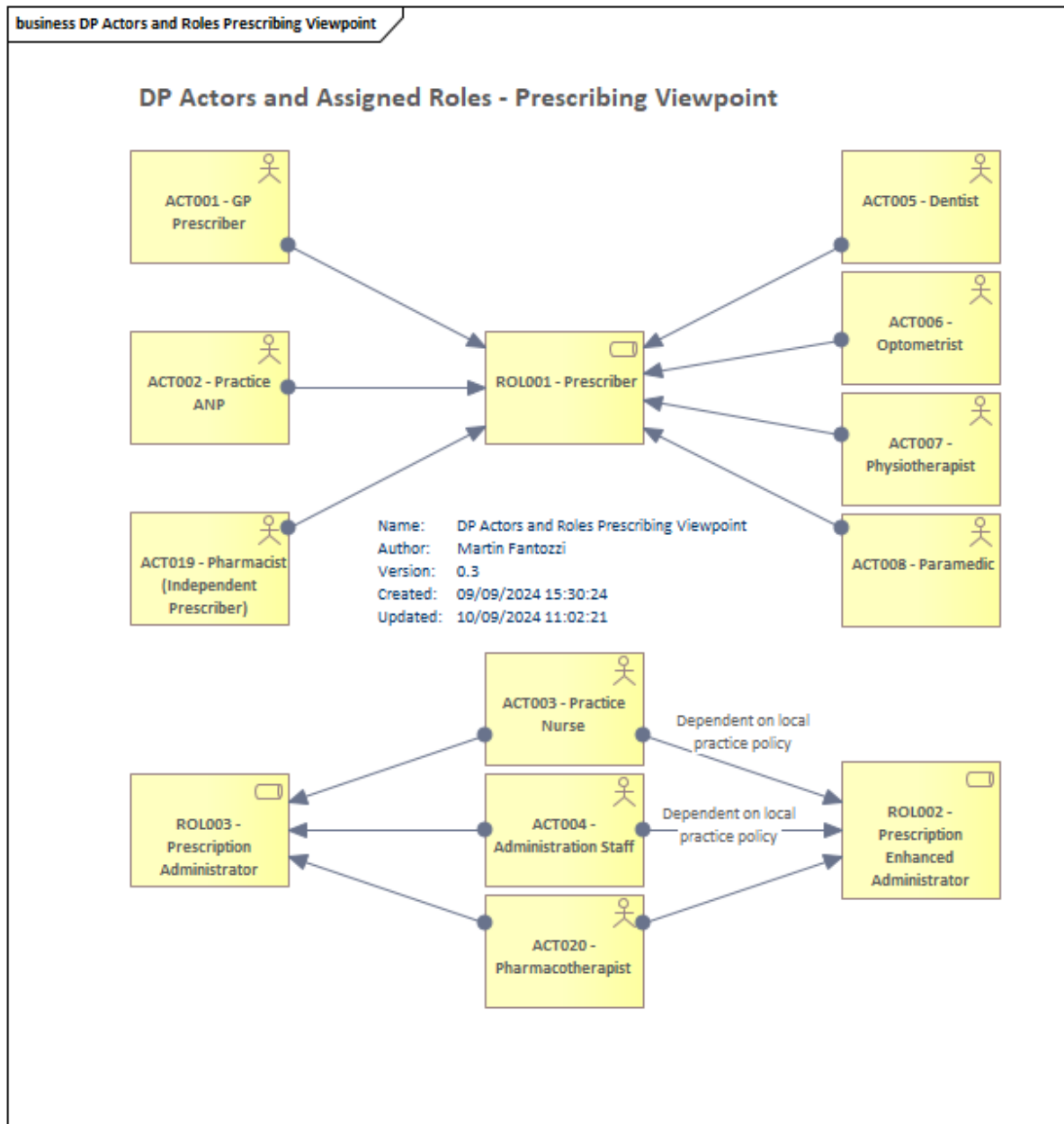
The following diagrams show the business roles that use the DPDP service. A role interacts with a business process or function with the aim of achieving a business objective. An actor may perform several roles, and a role may be performed by different actors. Role interaction is via a business interface, which is typically, but not always, some form of screen-based user interface (UI).

The simplest analogy is that of a stage or film actor, who will perform a number of roles over their career, and a role such as Hamlet, which has been performed by many different actors.

In order to simplify the diagrams, the roles are grouped and shown in diagrams based roughly on stakeholder groupings and areas of responsibility.

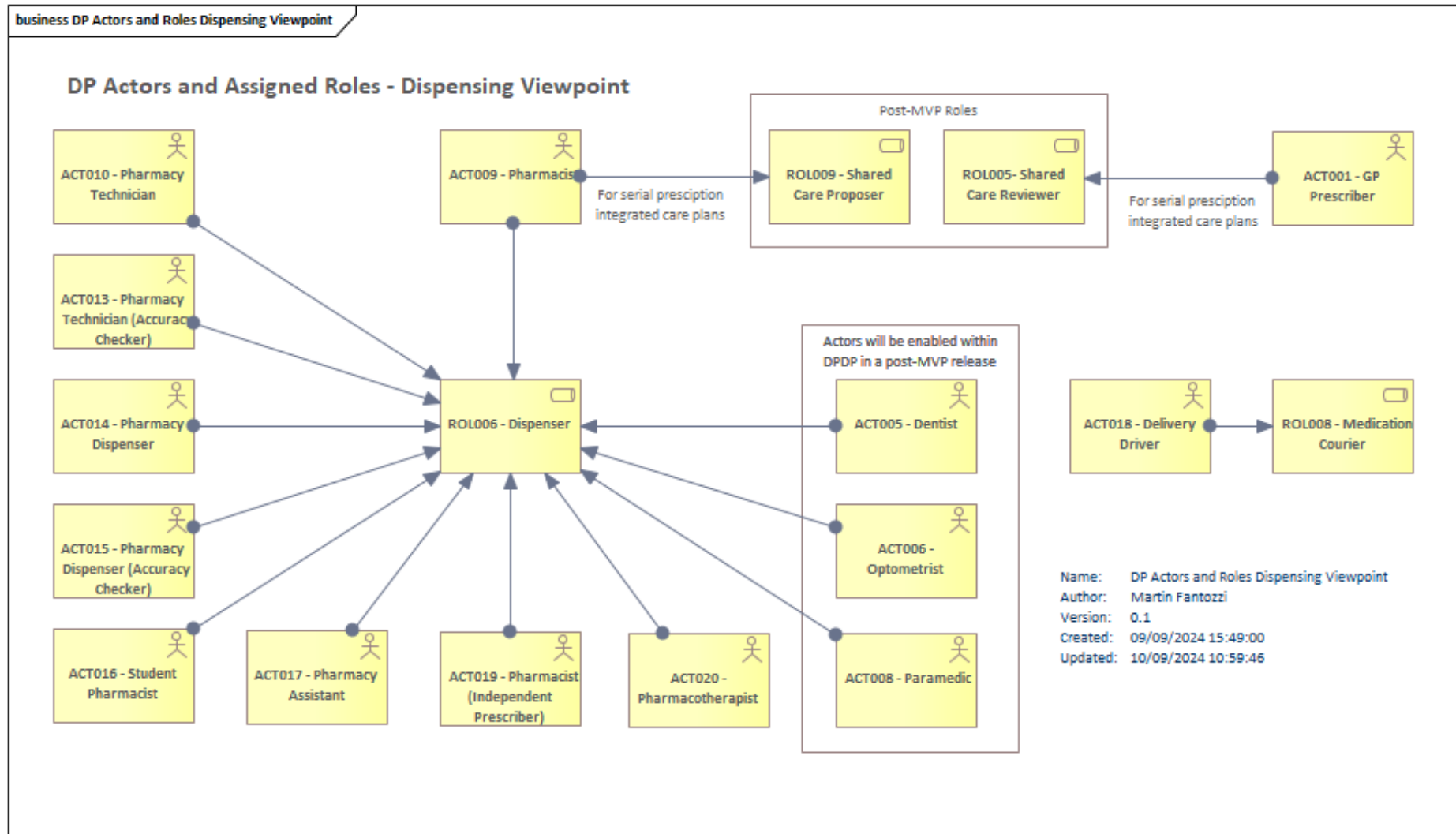
Prescribing Roles

The following diagram shows all the actors with a role for prescribing or managing prescription items within a prescribing context. The latter are roles that will allow actors with those to search for, retrieve, manage within the context of the prescribing module (ie, no ability to sign) and for the enhanced administrator role the right to cancel prescription items within DPDP.



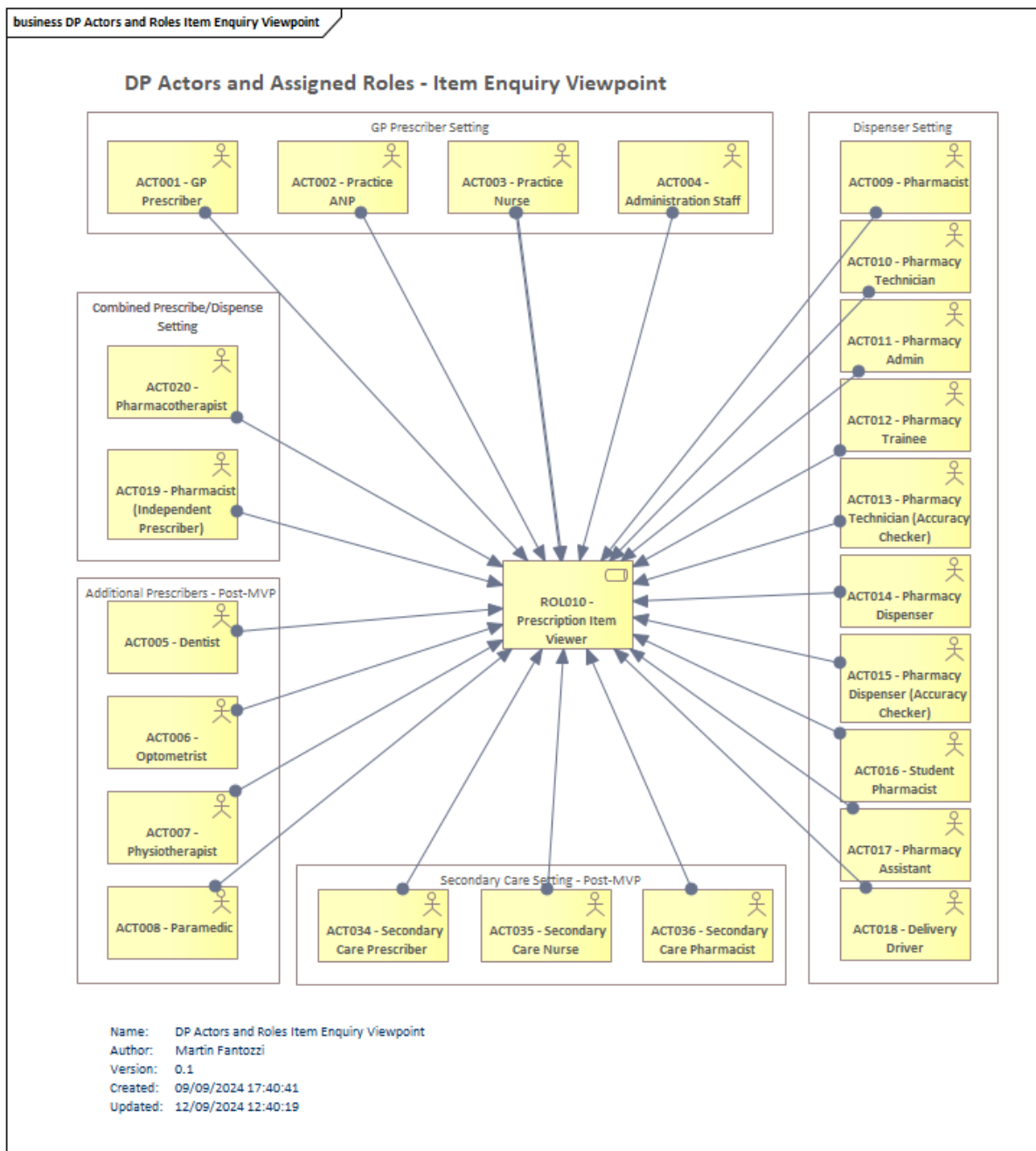
Dispensing Roles

The following diagram shows all the dispensing and related roles. These include roles which will be impacted both directly and indirectly by the changes resulting from the implementation of the DPDP service and roles that will be enabled post MVP. In some cases the impact of DPDP on the role is minimal.



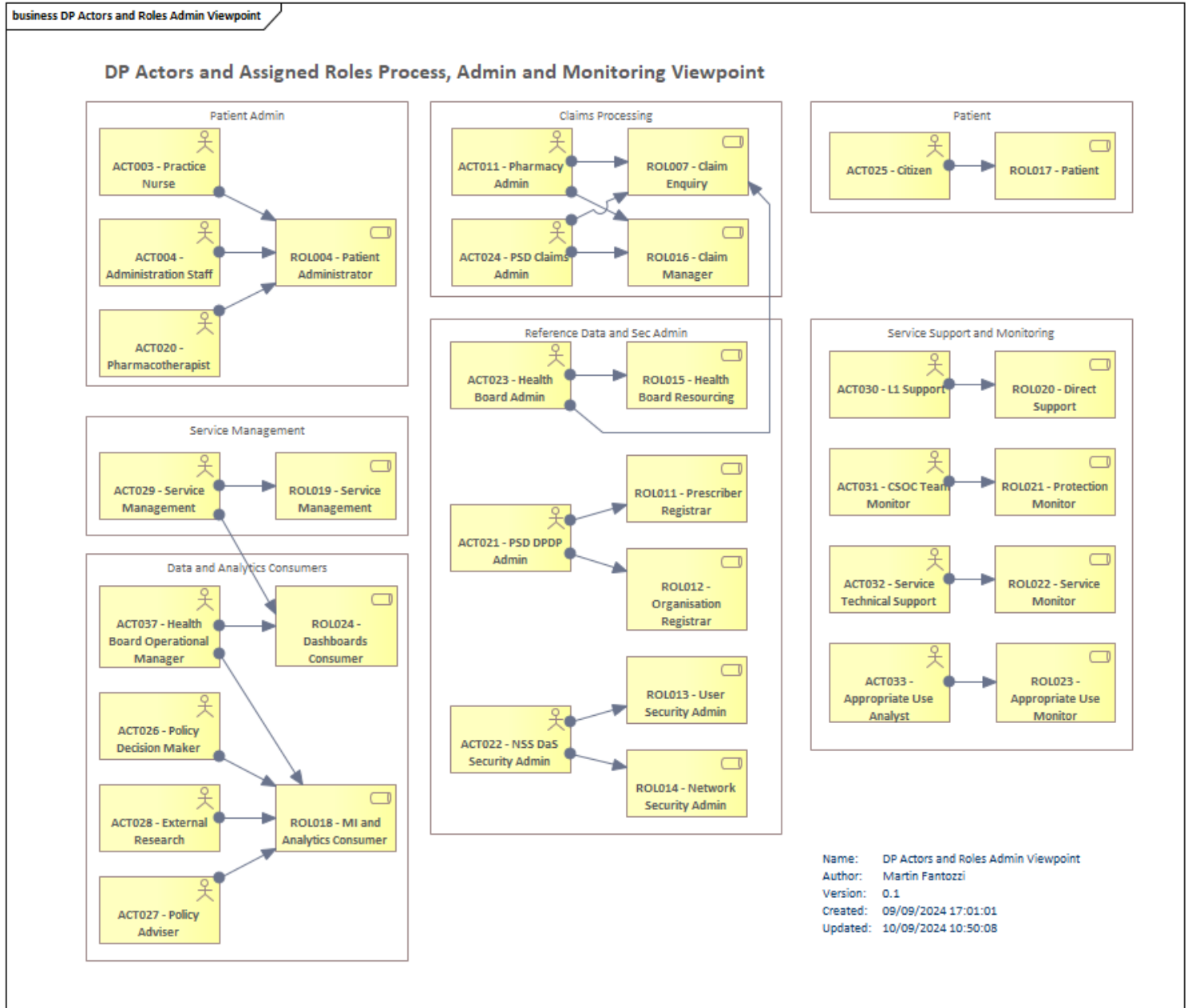
Prescribed and Dispensed Item Viewer Role

The following diagram shows the roles that will have the ability to search for and view prescribed and dispensed items. Note that there is no automatic default right within DPDP for an actor to view medication items and only the item viewer role will allow such access. The following mapping of actors is likely to evolve over subsequent iterations of the DPDP business architecture and planned future releases.



Patient, Process, Administration, Support and Data Consumer Roles

The following diagram shows the roles impacted by DPDP beyond prescribing and dispensing roles, both within and outwith DPDP itself. Some of these roles will be created and enabled by the DPDP service, whilst others will have little impact but will have either direct or indirect access to data sourced from DPDP.



Appendices