Engagement & Adoption above all else
Think Big, Start small
Be guided by practical usage
Breadth over depth
Do not model
Find Your Way
Start In the Right Place
Start Small, Make Mistakes, Learn and Improve
Starting With Axon: The Informatica Network
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Introduction

This playbook has been written to support the Data Governance (DG) activities of customers who have purchased Informatica Axon Data Governance (hereafter referred to simply as 'Axon'). It seeks to help users:

1. Understand how to use Axon for different goals.
2. How to get started with a DG initiative.
3. Understand how Axon works with other products. In particular we will cover:
   a. Informatica Enterprise Data Catalog (EDC).
   b. Informatica Data Quality (IDQ).
   c. Informatica Secure@Source (S@S).
4. Whilst primarily directed towards those directly involved in creating/managing a Data Governance program, it can be used to inform other members of the organisation how their assets may be represented.
5. Flexibly use Axon features to address specific business priorities for their governance programs.

Readers may decide to pick and choose which content they read, or follow it in a more linear fashion. Any methodology or approach outlined in the document is merely a suggestion, based either on our own original design, or observation of customer usage over the last few years. Alternative approaches may work just as well, and we'd be happy to hear about these.

DG is a topic that can and should touch everyone in an organisation (some companies we work with actively promote the idea that we are all data stewards). As such, consistent with the Axon approach to DG, this guide will seek to describe ideas for conducting your program in a way that allows the average business user to understand the contents.

- The main goal of a DG program should be user adoption, so this is a key test. If people can't understand the contents you'll lose them before you get going.

Where we need to dip into technical terms we'll try to make this clear and brief. There is also a Glossary of terms at the end of this document which may give further clarity.

What's In this Playbook

- Discussion of common key topics and suggested approaches.
- Outline of where and when to use these.
- Real life examples of problems and solutions.
And What's Not...

- This isn't a training manual for Axon features and functions. We may provide some detail on how to use certain features of Axon, but other resources should be consulted for detailed information:
  - The online user guide that ships with Axon for basic instructions.
  - Informatica University provided training courses - consult their website for more details on available dates and courses.
  - The Informatica Network - free to subscribe [https://network.informatica.com](https://network.informatica.com)
    - Product/Technical release notes
    - Knowledge Base articles
    - Introductory / Feature videos
Chapter 1 - The Data Governance Approach

Data Governance (DG) is a concept that has existed for a long time, but one which has seen considerable evolution in the last few years. Our view of DG seeks to bring greater cohesion between the activities of the business community and those of the technical community that support them. Traditional methods of aligning these viewpoints have often relied on rigid adherence to methodologies and models, that invariably cannot bend to every need. As such, some people in your organisation may have a different perception of what ‘DG’ means when you first introduce the topic to them. It will be important to realise and address this when engaging with your community of users.

To do this we first challenge you to assess your understanding of DG before you start talking to others. As you read this document be prepared to think differently, and perhaps to allow some flexibility into your approach to DG. Clients who have embraced this have found adoption easier to achieve and governance efforts more effective.

The 5 Must-Dos of Data Governance

Our view of Data Governance best practices, as supported by Axon, is derived from five core principles, which we refer to as the 5 Must-Dos of Data Governance:

<table>
<thead>
<tr>
<th>1. Break Out Of DG Silos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical DG implementations often established a very much top down operating mode of policies, councils, committees and roles and by doing so created a governance silo.</td>
</tr>
<tr>
<td>The data challenge in large organisations is a horizontal problem. Think outside the classical vertical of defining policies, standards, roles, definitions silo etc. we need to understand how data is being used in the firm and make data easier for everyone to engage with - not just the chosen stewards. We need to expose how data and firm hang together, we need to expose the data and governance network.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Go Beyond Data Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone can understand a story because it pulls pieces of information together as it progresses. Definitions do not tell a story.</td>
</tr>
<tr>
<td>The value of data is in its usage. We need to understand usage and context to initiate the dialogue with those business communities. If we want business adoption we need to include the business metadata of requirements, usage, pressures etc. and not only content ourselves with data definitions.</td>
</tr>
</tbody>
</table>
3. **Facilitate - Don't Police**

Our ability to police and enforce is minimal, let’s focus our energy on creating the right environment for people to do well around data, let’s make data easier for people, let’s make it easier for people to understand what is already out there, what to reuse and align to.

4. **Embrace The Chaos**

There is a lot of diversity which needs to be considered to in order to meaningfully engage the organisation at large. At the same time that diversity and the constantly changing organisation carries a lot of energy and opportunity; don’t fight the chaos - leverage the change to realise alignment and ensure adoption of a new way of working.

5. **Do Less, Achieve More**

No Chief Data Office or Data Stewarding team is ever going to be big enough to keep up with the ever-changing organisation.

Successful DG implementations are LESS about the doing or imposing and MORE about empowering, enabling others to succeed…

...whilst being mindful to what is already there and promoting reuse.

In practice we believe that this means:

- **DG should be driven by the business, not the IT function.** IT have lots of tools to help them do their jobs effectively. Axon is for the business.
- **The policing approach doesn’t work.** Culturally it’s unpopular, but it also creates too many rules which take too long to maintain and enforce.
- **Aspire to create a culture where good practice just happens with minimum conscious effort.** This new culture cannot exist in committee rooms, because that won’t touch/affect enough people. This culture is all about:
  - **Engagement & People, not data.**
  - **Acceptance.** The reality is that DG is far messier than anyone would like it to be, never mind that individual perceptions of a situation are different. Seek to guide people down the right path through principles and outlines rather than rigid rules
    - Mistakes (e.g. in perception / understanding) should be embraced, not criticised. Having the opportunity to publicly address them is invaluable - it provides answers to those that didn’t dare/never thought to ask, and leaves a documented response that others can learn from.
  - **Iteration - share your knowledge and invite feedback, then learn from it.**

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The Value of Governance

Data Governance is a key driver to manage data as a key asset of the organisation. Not only does effective DG create a community of users that might not otherwise communicate effectively, it has more tangible benefits which include resolving key business problems such as:

- Understanding and trusting where the data you use came from
  - Data Validation.
  - Report Validation.
- Defining and declaring Key Business Metrics.
- Understand the effects of changes to definitions - who will be affected, where is this data used, for what?
- Better cohesion in change projects - understand up/downstream effects.
- Better designed change because the right people are identified and consulted.
Chapter 2 - Key Concepts in Axon

To help support your understanding of how to use Axon, this chapter is a collection of short discussions of popular features and common tasks that we hope will position them in your minds. You won't need them all straight away, indeed you might never need all of them. If you are totally new to Axon this whole chapter is worth a read, others may wish just to dip in and out of familiar sections.

The content of this chapter will probably answer some burning questions you have, and will allows us to focus on the tasks users typically need to undertake, which are outlined in following chapters.

Functional Basics: An Overview of Facets

Facets, also referred to as Inventories are really just organised lists of things - assets used day to day in an organisation. The facet construct was created to help users review content with some form of meaningful structure. As you'll read many times in this document:

- You'll only want to populate Axon facets with objects that are directly relevant to your DG initiative. Anything else should wait, and we'll talk about where these objects should be stored later.
- Your use of facets will expand over time - don't worry if you only need to use a few facets initially.

We're often asked what kind of information should be put in each facet when designing the strategy for content load. We've laid out some observations below. Many facets will have obvious links to your assets, but all facets can be used flexibly to encompass various needs, something we've found necessary with successful DG.

The tables that follow seek to indicate typical/possible uses for each facet.

- Informatica Professional Services, or your chosen implementation partner, can help you assess how to translate your data assets/artefacts (we'll use these terms interchangeably in this document) into Axon facets.
- Note in particular any comments on use of the facet's Type field to differentiate assets that share the same Axon facet, even though you might initially think they need their own, separate facet. They are co-located because they share similar characteristics. We'll try to explain the most common examples, especially why we treat reports and database tables as Axon Data Sets.
Hierarchical Facets

Many facets below are described as being *hierarchical*. By allowing description of a parent/child relationship, assets can be subdivided into nested structures that allow logical groupings that help explain business context.

**Unison View**

Note the *Parent* column, which shows each object’s immediate parent.

**Object View**

All the parent/child relationships create a nested hierarchy, as shown by the indentations.

When creating hierarchies, start small and expand - start at a higher level, and add in more granularity if the need evolves. Plan to keep it as simple as possible.

The tables below will now describe our view of each facet. These tables are structured in sections to match the Axon user interface.
### Glossary
The core Axon facet. Hierarchical. An enterprise glossary allows everyone to access and understand key concepts and definitions, and align their activity to these definitions.

An Axon glossary is an enterprise glossary. Each concept should ideally be described once only. Users often need to combine and deduplicate multiple local glossaries. There is extended discussion of how to approach the glossary elsewhere in this document.

One common question that arises in early data loads is what content to add. Highly technical content, such as join types, is rarely relevant to the business, and as such unlikely to be suitable content for an Axon glossary - see the glossary discussion for the reasons why.

### System
A high level data container. The most typical example is a mainframe database that contains many hundreds of tables (some of which may later be represented as Axon Data Sets if relevant to the business). Other potential sources are sharepoints and productivity tools such as spreadsheets, documents etc.

Effective data governance requires us to declare any useful data wherever we find it. We also want to represent what’s actually happening rather than an intended design, which may have been correct at a point in history. Some of these sources may not be discoverable via technical scanning.

Note that Unison maps have different icons for some commonly used system types, to enrich the maps. Note that these typings and icons cannot be changed. Axon admins can add new system types, but note that these will use the same default icon.

Finally, you may notice that the System facet has a field for describing a parent. Clients often view a system as a collection of modules/applications that together provide some value to the organisation. This may be vital information to the functions that support the system. However, many of these individual elements are not visible to the business, most typically because they don't contain data, and because of this there is no value in representing them in Axon. The parent feature should be used where there are more than one data stores that need to be described for the business. Note that Axon maps will not use parent/child relationships to co-locate systems in a map.

### Data Set
Any identifiable collection of data.
- The most typical example represented is single named table
found within a database*.

- However, an Axon Data Set can be any collection of data points - it doesn’t have to be tied to some logical/physical modelling construct.
  - If you use a collection of data points, wherever and whatever it is, record it in Axon.

*Note that Axon should not be used to exhaustively catalogue every available table - only add those that are relevant to the organisations’ governance ambitions.

Importantly however, we need to describe many different reasons a Data Set exist - just like with systems (and other facets), we do this using the Type field. Typical Types you will need are supplied out of the box in the default configuration that ship with Axon:

1. Data Set: Any database table / spreadsheet / collection of data points/attributes
2. Report: reports, e.g. regulatory reports are named collections of data with a prescribed list of data points (attributes). These are held in the Data Set facet to allow exploration of the lineage that supplies the data.
3. Value List: Demonstrates reference data management, and where some attributes /column depends on this (rather than an enterprise reference data capability, such as the Informatica Reference 360 tool).

When creating an Axon Data Set, users are asked to associate it to one glossary object. That glossary object should be that which most closely describes the business purpose the Data Set supports

- We are often asked to extend this model to allow relationships to multiple glossary objects. This is not the purpose of this glossary association
- However we can already show the Data Set’s relevance to multiple glossary objects by relating the individual attributes contained in the Data Set to the Glossary - any Unison Search on the Data Set will then return all these glossary relationships.

**Attributes**

Individual data points found within an Axon Data Sets. These represent Fields, Columns or data points in a report.

Axon attributes are the core of describing lineage. We may find that an attribute we use in one Data Set is created elsewhere and moves around systems and data sets before it arrives in a Data Set of interest to the governance community. It is often crucial to understand the provenance of this lineage.

- Lineage appears on maps as SOLID lines
- How to create lineage is discussed elsewhere in this document

Attributes can also be associated to Glossary objects. This is useful
for a number of reasons. For instance, the official glossary concept can often clarify diverse names for the same data point in many different data sets. Also, connecting these means that you can isolate attribute lineage for a concept by performing a unison search on the associated glossary term.

In the Data Sets description, above, we said that you should only record those assets that are directly relevant to the governance needs of the organisation. The same is true with Attributes. Where the Data Set you wish to record happens to be a table with dozens/hundreds of columns, not all of these should be added to Axon - we typically find that limited numbers of these have direct relevance to business users.

### Interface

Interfaces describe transfers of information between systems - they help understand how data is transferred across an organisation. Some organisations support specific data flows, such as regulatory reporting, with specific packages of data transfer on a regular basis. This means that there can be multiple interfaces between the same two systems.

- Interfaces are not just for such IT supported regular transfers.
  - Can also be manual transfers, such as email.
- They are one directional. Where system exchange information in both directions, a second interface object is required.
- Can be associated to data lineage to show how lineage is supported.

**Notes on Interface:**

- An interface is often a concept not immediately understood by business users when first using Axon, so don’t worry if this does not immediately strike you as something worth recording. If they become important later they are easily added.
- Conversely, other clients have started using Interfaces to map out systems within the scope of an initial rollout. By connecting them together they give the user group something tangible to work towards. We call this *scaffolding*.
- Interfaces create DOTTED lines between systems in lineage maps.
  - The interface's arrowhead shows the direction of flow.
  - The scope of when an interface is displayed on a map is different to more detailed lineage.

### Data Quality

The DQ facet captures rules that measure some aspect of a particular attribute in a given data set. Axon expresses DQ information at two levels:

1. Standard Rules - generic rules, described at the glossary (conceptual) level.
2. Local DQ Rules - actual measurement of specific attributes in a specific Data Set.

The Informatica Data Quality (IDQ) tool records the desire to measure quality at two levels (it also performs other functions, such as profiling,
which are not relevant to Axon).

1. The general rule that describes measurement objectives - broadly similar to Standard DQ Rules.
2. Specific mappings, i.e. the application of one such measurement against one specific attribute in one table/Data Set - these are Axon Local DQ Rules.

---

**Business & Change Facets**

| Committee | This hierarchical facet seeks to list and describe activities conducted by bodies, groups (and, yes, committees...) that bring together people from multiple disciplines, functions and departments to support/conduct/approve specific activity. A commonly found example of this is a Data Definitions Council (exact name varies) that meets regularly to review and approve new/amended definitions. For now, the primary function is to declare and describe the different bodies that exist, so that their purpose can be understood.  
- Whilst the Committee facet does offer the ability to list all members of the body, this is optional, and can create low-value workload in maintaining the constituent members
  - If required, the description field can hold a URL link if the membership list is maintained elsewhere
- We have observed that many clients tend to record only one or two officers from each committee, to give a contact point for interested parties. |

| Policy | A policy is a documented set of principles/standards that set the direction for a given business purpose/requirement, or any restrictions placed upon their use. They are often the organisations response to external regulation, but may also relate to contractual limitations placed upon the organisation. Axon is not a policy management repository, but describing policies, and more crucially relating them to other Axon objects gives valuable context - visibility of what the policies affect, or their dependence on other assets.  
The facet is hierarchical - this is often used to break down one headline policy into multiple parts (business rules) which can be more accurately related to other Axon objects to give clear context and applicability. Policy and Process are often used together to show what |
**Process**

Process is a documented set of repeatable steps to achieve a desired outcome.

We have observed that client processes are documented in a wide variety of ways, either in process management tools or in various diagrammatic forms. As useful as these are to the people that know about and have access to them, exposing them to the community in Axon, then relating them to other activities/objects helps everyone understand the context of why the processes exist, where they are applicable, and what resources they depend on when executed.

The facet is hierarchical - this is often used to break down one headline process into multiple parts (individual steps) which can be more accurately related to other Axon objects to give clear context and applicability.

Policy and Process are often used together to show what control/restrictions are placed upon your assets (Policy), with Process used to evidence actual use.

**Project**

A project is any combination of people and resources that is initiated to achieve a particular aim. They are typically not regarded as Business as Usual activity, and often their aim is to effect large change in the organisation. The facet is hierarchical.

Projects are often described in Axon in order to relate them to all the objects that are likely to be affected by the project, so a proper assessment of the scope, dependencies and community of stakeholders can be made. This allows for greater transparency and reduces the likelihood of missing key elements, thus avoiding unintended consequences of implementing change.

**Change Requests**

A Change Request (CR) is a way in which the wider community can interact with the people that actively curate Axon objects day to day. They can ask questions, suggest new/corrected information to help more people understand assets and the applicability.

The facet lists all Change Request objects that have been raised against objects in any facet across Axon. A CR can be raised by any logged-in Axon user who wishes to contribute to, or get guidance from the collective knowledge of the community.

Change Requests are created by visiting an object in any facet and initiating the request via the Actions button (which may be labelled Edit for certain users). Each object is permanently connected to the object against which it was raised, and serves as a record of a particular
activity - examples of this are recording approval for a definition, assessing requests to make changes. Whether such a request is approved or not, users can review the content, and learn from it.

Once created, each new CR is notified to the objects’ stakeholders. Each object may have a variety of available workflows, and the stakeholders will choose which is appropriate of the request.

<table>
<thead>
<tr>
<th>Role</th>
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<tbody>
<tr>
<td>The role facet is not a typical facet. You cannot create roles here, as you would in other facets. Instead, this facet lists/summarises all stakeholder roles that have been assigned to objects all across Axon. By showing the details of the object, role, stakeholder etc. in Unison it facilitates a number of powerful searches that help you report on and control your DG program.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisational Facets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Area</td>
</tr>
<tr>
<td>The Business Area facet allows users to create a list of usable functional delineations that may mean more to the business that the rigid HR view expressed in the Org Unit facet. OrgUnit names tend to be very granular and can often be too specific for general use. Sometimes you just need to know that Marketing, Operations or Sales would need to be involved in some discussions, rather than an HR-derived Org Unit such as Technical Sales - Western Europe. The Business Area facet can help show general functional dependencies on key assets, and can use different relationship types to declare the reason for the association.</td>
</tr>
</tbody>
</table>

- This is different to declaring object stakeholders, which must be individuals found in the People facet.

For example, we may find that a number of departments (Finance, Marketing, Sales) all feel that they should have some say on assets that they rely upon, such as a glossary definition. We don’t allow entire departments to be an object stakeholder, but we can show that all three departments have a strong interest in the asset by creating Business Area x Glossary relationships.

The facet is hierarchical. This facet is similar in purpose to the Product and Client facets, users should ensure structures do not overlap. |

<table>
<thead>
<tr>
<th>Capability</th>
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<tbody>
<tr>
<td>A Capability is an organisational ability, feature, function or skill. The</td>
</tr>
</tbody>
</table>
organisation makes the capability tangible by leveraging People, Processes and Technology. In other words capabilities typically link to the other resources and assets that make up and support that capability. The capability facet is hierarchical.

In terms of business viewpoints, the capability facet provides a macro view/lens for more senior stakeholders to engage with the governance of data and the business assets they support.

In recent years regulators have started to prefer to express regulatory requirements in terms of principles and organisational capabilities. As a result the capability facet has been commonly used as part of those use cases.

Examples of capabilities are the organisation’s capability to submit a given regulatory submission, ability to onboard clients, ability to capture or settle trades, ability to fulfill orders etc.

A common use case for this facet is regulatory reporting, often called Business Outcomes by Financial Services firms. These are collections of regulatory reports (Data Sets), and the Processes that deliver them. They can be brought together, so that a Unison Search can easily find them.

- Use of Capability for Business Outcomes is so common we are often asked to change the name of the facet.
- As discussed above, we see other uses for the facet, and we would therefore recommend an alternative approach:
  - Use the Capability Type field to make this differentiation
  - Configured a Type = Business Outcome in the Admin Panel.

### Client

The Client facet allows users to describe summary user personas around the business to categorise high level business cases. If you the ability to answer a question like ‘what kind of business function do we need to identify as relevant’, the Client facet may be appropriate. These can then be associated to Axon assets to give context and facilitate easy Unison Search. Some example client types:

- Financial Services: Corporate Client / Personal Client / Mortgage Client
- Healthcare: Animal Health / Human Health

This facet is hierarchical, and is similar in purpose to the Product and Business Area facets, ensure structures do not overlap.

### Legal Entity

The Legal Entity facet allows you describe the internal structure of an organisation, e.g. different companies/corporate bodies within a group, or 3rd party companies that perform day to day activities on your behalf (such a data processors in GDPR). Using the Legal Entity facet to make relationships to assets allows you a lens to break down these
assets between these different parts of the organisation.

It’s quite common to find that a group owns a collection of companies that can work together day to day almost seamlessly. This makes it hard to know e.g. which of these legal entities owns hardware, software etc that is accessed by the wider group. Activities such as regulation, acquisitions and disposals may require this view to be understood.

The facet is hierarchical. It should not be confused with the Geography facet, which allows a view based on political classifications such as country/region.

Many facets can make links to this facet. Where this view is likely to be important to you, you should require this relationship to be created as part of your operating model.

| Org Unit       | The Organisational Unit facet records the Human Resources view of a company - Axon user John Adams works in *North America - Alliance Marketing:*  
 |                | • It is a mandatory association when creating Axon users in the People facet.  
 |                | It is needed to add context to all employees/Axon users, and may also be needed as part of Single Sign On technologies.  
 |                | The HR view can often be more rigid/detailed that is required for some activity. We gave the example above of John Adams working in *North America - Alliance Marketing*. Sometimes we just need to know that something is relevant to *Marketing*. The Business Area facet, described above, can be used to make more generic, business friendly constructs and associations to objects.  
 |                | The facet is hierarchical, which can allow a Group > Division > Country > Department structure. However, many clients don’t require this view in Axon, and are happy to load a flat Org Unit structure.  
 |                | Especially when running a PoC/performing initial data loads into Axon, we’ve observed that clients often enter placeholders rather than real, HR sourced values. |
| People         | The People facet lists all members of your organisation that have been granted user access to Axon. If you have a user account you can log into Axon  
 |                | • If not you may still be able to view the content, unless general access is controlled by your systems team.  
 |                | • If you can view Axon without logging in, you won’t be able to contribute / take stakeholder roles etc. |

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Although you may use Axon's Bulk Upload to add users in the early stages of an Axon deployment, most clients choose to enable Single Sign On to make management of users easier going forward.

Creation of a new People object requires that a user *Profile* is selected. See the section below on Profiles for more information on how this affects a user’s ability to interact with Axon.

The People facet does not support creation and management of groups to facilitate asset ownership to a group of users.

<table>
<thead>
<tr>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another facet (like Legal Entity, Geography, Client, Business Area) that allows a lens to be placed on your assets. In this case the facet allows you to record and describe from a product perspective.</td>
</tr>
<tr>
<td>Note that Axon is not a stock management system, so the classes of product that we recommend are higher level concepts such as:</td>
</tr>
<tr>
<td>● Banking: Mortgages, Saving Products</td>
</tr>
<tr>
<td>● Retailer: Domestic Electronics, White Goods, Garden, Home</td>
</tr>
<tr>
<td>Many facets can make links to this facet. Where this view is likely to be important to you, you should require this relationship to be created as part of your operating model.</td>
</tr>
<tr>
<td>This facet is similar in purpose to the Client and Business Area facets, ensure structures do not overlap.</td>
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</table>

### Regulatory Facets

<table>
<thead>
<tr>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primarily designed to capture and describe external regulations. These can then be related to the organisation’s internal response, as detailed in the Policy facet.</td>
</tr>
<tr>
<td>This is a hierarchical facet, that allows users to choose the level of detail captured. For example the recent GDPR regulation could be captured at a high level, using one object, or with any/all of the 99 separate articles of the regulation captured as child objects.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>As the name suggests, this (hierarchical) facet allows users to add a lens based on country/regional relevance of an asset.</td>
</tr>
<tr>
<td>Note: This facet was formerly known as the Jurisdiction facet. It has been renamed to reflect the evolving uses for this lens.</td>
</tr>
</tbody>
</table>
Regulatory Theme

Similar in purpose to the Client, Business Area and Product facets, this allows easy segmentation of assets in the Regulation facet.

Regulator

Only applicable to the Regulation facet, it allows users to describe bodies publishing and enforcing regulations.

Loading Assets - Object Dependencies

When creating a plan for loading assets, be aware that there may be dependencies that you need to allow for. In order to create a relationship between two objects, both must first exist in Axon.

As the creation of some Axon assets have a mandatory dependency on other objects (see the Axon User Guide for specifics), some sets of objects must be created in a set order. These are shown as dark green objects in the picture below. Those that are coloured grey have no dependencies at object creation (other than People, for stakeholders).
Functional Basics: Connections - Relating Objects Together

Once you have listed a collection of assets over a few facets, you’ll want to explain their relevance / dependency upon each other:

- There are many reasons to connect two objects together
- These reasons can be configured as relationship types (in Admin panel)
- These relationships give context to the objects involved and form part of their description. We demonstrate why when we return to relationships in Chapter 3.

These different relationship types can be viewed in the individual objects, such as the example here, that shows that a System can have multiple reasons for relationships to Legal Entity - one part of the group hosts the system, another is responsible for hosting.

Relationships & The Glossary

At the core of this activity is the Glossary facet. This should capture a set of definitions at the Enterprise level, not simply restate a collection of local dictionaries (see later section on glossary for discussion of how to approach this).

When you have a set of widely understood, widely accessible definitions, most content loaded into Axon can be linked to these. This allows anyone to search for a concept and see all activity related to this concept, wherever it occurs in the organisation. Axon’s Unison search allows you to choose single or multiple objects to get the view you need.

Your assets will be used for a multitude of reasons and activities, be it e.g. day to day reporting, or ad-hoc activities. Not all of this is visible, and it’s very rare for everyone to be fully aware of others’ dependencies.

- That’s why change often has unintended consequences - a common complaint is that ‘we didn’t know you used that’, or ‘it was designed with this user in mind, not you’
- ...sometimes followed by ‘you shouldn’t be using that, you should be getting it there’
- ...or worse still ‘we made a bunch of changes to that data, it probably doesn’t do what you think it does any more!’

DG should be a statement of what’s actually happening in the business, something we often refer to as the ‘messy reality’, whether you like that reality or not. It should not be a bland
restatement of what a document says *should be happening* (after all, you already have a document that tells you what should be happening…).

You’ll only get a true view of this by approaching the task of capturing this in an open manner, so that the community isn’t scared to tell you how things really happen (better you find out now before something unexpected goes wrong, or a regulator asks...).

The first step in addressing a problem is to admit that one exists. Whether things work the way that they should / you want them to, you can’t hope to change things until you are informed. If you go looking for a fight, everyone will be naturally defensive and reluctant to share. There will be many reasons (good and bad) why your reality has evolved the way it has.

Multiple relationships can be made between Axon objects, which gives the entire community visibility of how dependent the entire business might be on the same collection of assets:

- The often show users why the ‘simple’ change that they have requested is not as simple as they think.
- It allows impact assessments to be made to ensure business continuity when changes are implemented.
- It allows all dependent users to be identified and consulted (or at the very least forewarned).

**Data Sets & Glossary**

An Axon Data Set is a very flexible object. As discussed earlier in the facet overview, it can represent:

- A database table
- A spreadsheet
- A single worksheet within a spreadsheet
- A report - internal or regulatory

As we’ll demonstrate, we believe that each of these do the same kind of thing, we capture them in the same facet, and use the Type field to differentiate them for easy search later. This will be invaluable later when you start to record lineage, as you’ll find that all such types of asset are often found at different stages of the same lineage story. Some other things to know about data sets:

- When we get to the stage of recording their contents, you’ll rarely need to ingest and describe the whole contents
  - Database tables tend to have 100s of columns, DG initiatives should not need to use/describe all these - you should be interested in the most important elements only - why complicate Axon with content that no one in the business knows or cares about?
  - A cataloging tool such as EDC can inform and hold other assets until such time as there is a clear need to bring them under closer governance.
- When creating a new Data Set, Axon requires that you align it with *one* glossary object
○ See the section above on general reasons for relating activity to the glossary
○ Unlike most facets, this glossary connection is mandatory. Data Set names tend to vary enormously with the business area for which it was created, or, equally common, database tables often have technical names (e.g. T8921B), which gives users no clue as to the business purpose.
○ The link to the glossary makes that contextual connection which allows other users to understand the object. Think of the Data Set x Glossary relationship as using the glossary terms that best describes the primary purpose for which the Data Set was created.
  ■ We’re often asked to allow multiple glossary connections to a data set because it contains data from many subject areas - that’s not the purpose of this relationship.
  ■ If you need to describe this level of granularity, you can - at the attribute level. Attributes can be related to the Glossary concept they represent - see the next section on Attribute to Glossary relationships.

Attributes & Glossary

Similar to the discussion about data sets above, the naming conventions used for attributes are so diverse that the attribute name frequently can’t identify the asset, as the screenshot below illustrates.

Most of the attributes shown have already been linked to the glossary (as shown by the last column). Where this hasn’t happened, users can’t make the disambiguation easily/at all.

If we now change the search shown from the glossary term to look for attributes with ‘CMD’ in their name we find one attribute (last row) hasn’t been related to (what appears to be) the obvious glossary term.

Rev 1.1 24/78
Whilst the name of the asset in this case might suggest that it’s probably another example of the CMD-ID glossary concept in use, the link to the glossary would not only confirm that, but the connection means it would be found when the CMD-ID glossary term form part of a Unison Search.

Many organisations use the count of attributes that are/not aligned to the glossary as one of the measurements of a successful DG program. The search is easy, is shown below, and can be saved to re-run periodically.

It’s unrealistic to expect all attributes to be connected to the glossary, but it’s a good goal to monitor and improve over time. It is common to find attributes that could/should have been connected when they were first loaded, and there are ways to update existing content, such as (in no particular order of preference):

- Workflow - raise a change request against the Data Set containing the attribute
- Bulk Upload - Update mode
- Glossary - Data Discovery tool
  - Set patterns and rules to find attributes that ought to be aligned with that glossary term

**Functional Basics: Informing the Community**

As soon as you start connecting objects together, things will start changing. The initial reasons for connecting objects may not change, but you will probably need to review what impact the changes will have on connected objects:

- A policy controlling 8 glossary objects has been revised - how many of these objects are affected by this? Should we add more / remove others? Who do we need to talk to about this?
A legacy system is being decommissioned by IT, and a new one is being planned - who will be affected by this? What processes, policies and projects depend on this system for data? Who do we need to consult?

The sale of a subsidiary is being considered - which assets do they depend on, who owns them? Will both businesses be able to operate smoothly after separation?

The key theme here is that communities need to be informed to effect change. Axon supports sharing information/change consultation through a variety of constructs found all across Axon:

### Unison Search

A Unison Search can identify objects that *have* been associated with other objects. Such searches can also be configured to find things that have not been associated.

- Any user that saves a search can share it with other Axon users.
  - If email is configured the recipient will be told by email
  - Any user can find searches shared with them when logged in. Find these by following `Unison > My Searches > Manage Searches > Searches Shared With Me`.

### Stakeholders Tab

All objects have a Stakeholders tab. This not only shows the people that have been tasked with curating the active object, it also shows the community of users who are stakeholders on related objects - this grid, below the main objects' stakeholders identifies who could be affected by each others' changes.

### Workflow

Axon has a built in BPMN 2.0 workflow component which facilitates the creation of workflows to manage approvals, change etc and bring together appropriate experts from around the business. The core of workflow is to channel activities around objects stakeholders, but once a workflow is running, the stakeholders can bring any Axon user into the discussion.
Workflows linked to Change Requests (CR). Any logged in user can raise a CR object, these are permanently linked to the objects they are raised against, and thus discoverable via Unison Search. The CR captures all activity, including documents, comments captured during the execution of the workflow. This provides evidence of the issues and decisions made.

Notifications

Notifications: In the Unison toolbar you’ll see a bell icon with a count of messages you have received. These relate to stakeholder roles you’ve been assigned and any workflow actions.

Be aware that although only stakeholders can explicitly be part of pre-configured workflows, any user can be asked to contribute to an active workflow (via the workflow Discussion feature), so anyone can get workflow messages.

My Account

The toolbar > My Account link (click your user name to access) is a shortcut to your own People page (if you are logged in). Other users can access this from Unison. This shows:

- Responsibilities: A list of the objects on which you have a stakeholder role
- Following Tab: A list of the objects that you do not have a formal role on, but want to be kept up to date on any changes (see Activity Stream & Workflow).
- Activity Stream Tab: This has two sections of of interest:
  i. Notifications: If you instance is configured for email users can select to be notified of events concerning them daily/weekly/monthly. Contents of the email are described below.
  ii. Activity Stream: This contains the details of any changes you objects that you either have a stakeholder role on or follow. These changes enter your activity stream after an object edit has been made.
Activity Email

In the section above on My Account we showed you that email updates can be sent to any user (but only if email has been configured for your instance AND the user has elected to receive emails).

- The contents of this email summarise themes discussed in the points above:
  - Stakeholder roles awaiting acceptance
  - Any workflow notifications
  - The contents of your Activity Stream for the period identified by your notification frequency (i.e. if you have a weekly frequency, you’ll be told about object changes in the last week only)
- We advise caution if you’re thinking about configuring multiple instances for email, as users can be easily confused on what they need to do. Note that should you go ahead with this, be sure to make users aware to check the email footer. The Activity Email footer states which instance has sent the message. The footer message can be configured in the Admin Panel.

Functional Basics: User Profiles vs. Stakeholders and Licenced Users

Axon Profiles

Axon has three different types of user, called Profiles:

1. WebUser
   a. Almost all Axon users should have this Profile
   b. Can Log In, create and save searches, create Change Requests
   c. Out of the box, no ability to create/change content
   d. Can only create/edit content if assigned Stakeholder Roles on objects

2. Admins
   a. Unlimited object creation/editing
   b. Limited access to Admin Panel

3. SuperAdmins - as Admins, plus responsible for controlling all configurable parts of Axon - unlimited access to all parts of Axon
Profiles and Licenced Users

Any user given the Admin/SuperAdmin profile count as one of the licenced users you have bought. WebUsers, *when first created*, do not count as licenced users, but can become so, *but only when*:

1. They are assigned one or more stakeholder roles in object(s)  
   AND
2. That role has either the **New** or **Edit** permission

Note:
- If these conditions are not met, they remain WebUsers that don’t cost a licence.
- If the user rescinds the roles that met these conditions, the user returns to a state where they are a WebUser that doesn’t cost a licence.
- Similarly, if the New/Edit permissions are removed from a set of Stakeholder roles (in Admin panel), users left holding a collection of roles that now have now New/Edit permissions also return to a state where they don’t cost a licence.

Stakeholder Roles & Permissions

If we wish to recognise someone as e.g. a Glossary Steward, and thus inform the community of the responsible person, we need to edit that object and make the assignation on the Stakeholders tab.

Users gain permissions according to the Stakeholder Roles they are given - all users who hold the role of Glossary Steward have the same permissions.

- (If you ever need to check what permissions are given to a Glossary Steward, the easiest way to check is to click the microphone icon beside the role title (see picture below).

Permissions for each role are set by SuperAdmins in the Admin Panel - a short description of the role, and the associated permissions:

- **View** - the ability to see the object in the limited cases where it might be suppressed from general view
- **Edit** - the ability to edit *this particular object only* - if the user needs to edit other objects they need roles granted on those objects
- **New** - the ability to create new objects *in this facet only*
Functional Basics: Dropdown Descriptors

Every Axon screen has a collection of fields that describe some aspect of the object you are viewing. Many of these appear in the object’s Summary tab. These can be text fields, but many are configurable sets of dropdown values e.g. Lifecycle, Type, Classification etc.

Out of the box the dropdowns are typically supplied with a lean set of defaults, such as those shown in the screenshot above (for Glossary Lifecycle). It can be beneficial to change our default values to match the terminology at use in your organisation. These values are controlled by your central Axon team, to keep them manageable and meaningful.

- Axon can be shipped completely empty of dropdown values, but that adds time to set the configuration before Axon can be used, so we recommend starting with our defaults.
- Should you choose the empty option, be aware that you'll need to allow for the time required to create review and signoff these values before you can start using Axon. This can be affected by a number of factors in your organisation, outwith the control of Informatica or your chosen implementation partner.

Whilst we do recommend reviewing these values to ensure they're consistent with the language used in your organisation, we’ve found that the values supplied are generally good enough to get going with, and can be amended (in the Admin Panel by a SuperAdmin user) as and when necessary.

- Note that some organisations will be content to let the DG team work these out for themselves.
- Others require more thorough assessments to be made. Where this happens, manage the process carefully, this can turn into an industry very quickly, with comparatively limited value in return (and a lot of pressure to complete the exercise and just get on with things).
  - Where you do need to justify decisions it is essential that a thorough explanation of the context, choices and associated reasoning is presented. Those making the decisions may not yet fully understand Axon, or any trade-offs you wish to make between rigour and simplicity of representation.
  - You could ‘just get on with it’ and let Admins use the Bulk Update feature to change the dropdown values later.
Although we think you’ll be able to make a good start with the default values, one area that might require early attention is the Stakeholder role names and permissions, which are discussed below.

**Frequently Asked: Deleting Content**

As users increase their understanding of Axon, we are occasionally asked how we can delete content from Axon. Our traditional answer has been that we have deliberately made this difficult, for a number of reasons e.g.:

- We strongly advise against deleting content that has simply become obsolete. It may have historical value later, especially if part of a regulatory enquiry.
  - The Lifecycle field can be used to show different stages of maturity/usage, such as retirement/obsolescence, without affecting the Axon Status.
  - All objects have a History tab that show information about the evolution and retirement that may be required at a later date
    - Regulatory enquiries are typically made some time after the event under investigation

- Users should not be able to hide/remove content simply because they disagree with it - different people often have different understandings of the same situation. Exposing these viewpoints and working to create a shared understanding is a very powerful way of bringing the community together.

We’re working to make deletion easier (see Roadmap, below). For now, you can use an alternative approach, which we call ‘logical’ delete. It uses Axon Status = Deleted

- Most facets have an Axon Status field in the Summary tab.
- Where Axon Status = Deleted, objects can only be seen in Unison by stakeholders with the View permission (or users with Admin profile). All other users cannot see/access the object in Unison/Quick Search
- Relationships cannot be created to objects with this status - the Impact tab in other objects will not offer them for association.

**Deletion: Roadmap**

Axon will introduce the ability to completely remove objects from all users’ views in the near future. It’s worth being clear now about when and why to use this feature:

- To delete objects that might confuse users e.g. accidentally created duplicate objects
- To reverse the addition of larger numbers of objects that were loaded into Axon, but do not require close governance.
- Over time, objects that have sat in a Lifecycle state of obsolescence for a long time may be deemed safe to finally delete.
Chapter 3 - Starting Your DG Journey

Whether you are trialling Axon with a PoC/Pilot, or are embarking on a larger journey, clients often have the same questions, and needs. We hope that Chapter 2 answered some of these questions, let’s put it all into practice now.

Naturally a full rollout will have some additional steps you’ll need to think about, and we’ll discuss those in the next chapter.

However, for now let’s assume the following typical situation:

- Axon is installed (or scheduled for installation very soon).
- No integrations available just yet.
  - This might look and sound like a negative on your project plan, but embrace the time you have to use Axon standalone - you’ll learn a lot about how things fit together, and how to use the facets we outlined earlier.
  - It’ll help you understand and plan better integrations.
- You have a small team tasked with the initial rollout, who probably don’t know that much about Axon.
  - There will be a plan for a wider rollout once some preparatory work has populated Axon with good examples of content.
  - Get your team booked onto an Informatica University course, so that they can touch the tool and get used to it.
- You want to get started!!
  - You probably have Informatica Professional Services or a chosen partner available to help get you started.
- Review your DG challenges - why did you decide to use Axon?
  - Break these up into a few mini-projects that will populate different facets in Axon and allow connections to be made.
- Communication is key - keep sponsors updated and bring stakeholders in gradually and make sure they are comfortable with what you are doing and how you are representing the assets they own/care about.
  - The Goals of a a DG program
    - And where you are in the plan.
  - What they are being shown (we can’t promise the visualisations in Axon will look exactly the same as whatever they are used to).
  - Excite the community
    - Show them the challenges you face and how you are addressing them.
    - Share early win stories.
    - Be prepared to iterate your approach on feedback received.
The 5 Principles of an Axon Implementation

These principles are frequently shared with new clients to help set the scene. We present them here in order to explain how we realise these principles via the extended discussion in the content following below the principles.

1. Engagement & Adoption above all else

Knowledge without community goes stale instantly

The goal is not the best metadata but the most used

High usage allows you to have a shot at adoption

Connect into business facets for engagement and value

Heavy governance breaks adoption

Promote reflection, do not recycle

2. Think Big, Start small

Have vision & principles

Starting small allows you to carefully curate the engagement

We do not have the answers upfront: start small and continuously learn and improve

When sufficient learning has been acquired, the networked communities will bring scale fast
3. Be guided by practical usage

Focus on what is used, being complete and exhaustive often hinders usage;

No knowledge for the sake of knowledge.

Capture knowledge in a manner that is easily created and consumed, being too precise and insisting on consistency often hinders usage.

4. Breadth over depth

Outline first, add depth later if required.

Context drives relevance, context allows relevant communities to participate.

Less detail reduce burden of maintenance.

Unlock 80% of the value with 20% of the effort.

5. Do not model

Models are hard work and only accessible to modellers.

99% of people do not understand models.

Modelling at an enterprise scale has never worked.

Models can be referenced.
Find Your Way

As you follow the steps outlined in this chapter, you’ll start to work out more detail about how Axon can help your DG program. Many clients do choose to capture these in an Operating Procedures document, which may give useful guidance to the wider community - in keeping with the principles laid out above however, base these on guidelines not rigid adherence.

- Tread cautiously but move fast - with initial loads and reviews. We have often observed that the first few weeks can be a learning process for all involved. The pressure to achieve too much can be counter-productive, and introduce unnecessary stress.
- And once you’ve set the boundaries, stick to them. Scope creep is a common issue in any project. The specific risk to DG is that assets are recorded because they were available, not because they have been specifically identified as within scope.
- Less isn’t just more. Less means that it’s easier to follow the initial data loads, understand their connections, and follow a story. This can become harder to achieve when larger and more complex asset/connections are loaded.

Start In the Right Place

...and, unless a business imperative drives or contradicts this, that place is wherever you feel comfortable.

We have observed companies in the same industry start to address the same problem from very different places. Ultimately, they end up (more or less) in the same place, but always achieving the goal of bringing the right assets under close governance.

- For example, banks tackling the requirements of BCBS 239 are trying to show robust regulatory reporting. Some start with their documented processes, and then find and relate this to the data flows that deliver these.
- Others however started with lineage and later added the process (and policy) view - why?
  - Typically they felt they were stronger/more knowledgeable/better documented in some ares vs. others. They started with what they knew better, so that they could use that momentum to build up confidence before they tackled less documented/understood areas. Clarifying what you know gives context to what you don’t.

Start Small, Make Mistakes, Learn and Improve

The picture below can often be useful in helping you decide where to start. It is impossible to bring thousands of objects under governance quickly, so don’t try to.
The most critical assets are typically the best understood, although perceptions of even these can vary enormously.

Time and time again, DG projects have found that the documented/expected view is not completely accurate. This is a win. Documentation is notoriously hard to keep exactly accurate, especially when that document is not always available to/accessible by those that could contribute to its evolution, spot changes etc.

Finally, and perhaps somewhat controversially, don’t be scared to start again! The learning process that clients go through in the first few weeks is such that we often see clients come to the conclusion that they have developed a better understanding of their assets and structures and want to restart with a clean sheet. This is not lost time. This is not a failure.

If it happens, embrace it. This can be a very effective way of rebooting your DG initiative and developing your Operating Model along more workable lines that better guarantee success. Clearly you do not want to get too far into your DG initiative before making such a call. We therefore recommend that in the first 4-6 weeks you:

1. Agree a few Use Cases that get your user group working with objects in Axon
2. Don’t go too deep
3. Share your work with stakeholders, and iterate based on their feedback
4. This work tends to happen in a period where integrations are being planned, but not available
   a. This is good for understanding how objects fit together
   b. Builds trust in the integrations when they are delivered, and may even better shape how they are delivered
   c. It also means your content is stored in Axon bulk upload templates - keep them in case you do decide to rework things.
Whether or not you feel that you want to rework your content by starting again, by testing the waters with limited projects, you build up trust and confidence in your DG team and their stakeholders.

Starting With Axon: The Informatica Network

https://network.informatica.com/welcome

Informatica Network is a unified community that provides a healthy ecosystem for our customers to connect with their peers, Informatica experts, and broader community to accelerate their learning, deployment and adoption of Informatica products using any of the interaction channels.

It’s free to join and contains a community page for Axon practitioners with content from both Informatica and client practitioners. It has a lot of content that might help you at this stage of your project. Typical content includes:

- All release notes for each new version of Axon.
- How to Videos.
- Access to Knowledge Base articles - common challenges and solutions.
- Blogs.
- Technical support documentation.
- The latest version of this playbook.

Common Initiatives

We mentioned earlier that we encourage you to start wherever you feel comfortable. However, there are a few key activities that all users typically undertake. The next section will cover these and give some guidance on how to approach them.

Start Collecting Data Before Axon Install

Many clients want to get started preparing data to load into Axon before they have access to their Axon instance. Data collection should be done as part of a planned set of Use Cases/Mini Projects - you need to ensure that the data loaded is going to be useful and relevant.

One thing you’ll find on the Axon community pages we just mentioned is a Data Collection Starter Pack. The Data Collection pack is a collection of the most commonly used Bulk Upload templates to help you get started.

When using the Data Collection Starter Pack, you may wish to refer to the overview of facets, above to help you think how to structure your assets.
Starting With Axon: Stakeholder Framework Configuration - Names & Permissions

How Axon’s user profiles and permissions engine works was introduced earlier. Please refer to that content before reviewing this section.

Clear ownership and accountability structures are essential to effective DG - if no one is actively managing your key assets, you’ll lose control of what’s happening very quickly.

As mentioned earlier, Axon ships with a basic configuration, to which changes can be made (by SuperAdmin users) on the fly as the need arises. However, one area that often needs some thought before exposure to the user community is the Stakeholder framework. The community of users often get their first look at Axon after a central team has done an initial data load, and new users often find they’ve been assigned roles. It’s good practice to ensure that these role names are as meaningful as possible (e.g. some companies we’ve worked with do not like using the term 'steward' in roles).

Naming Roles

For many clients, aligning the stakeholder role names will be a relatively simple activity, and perhaps only require limited adjustment in a few facets.

However, in some organisations, especially those that span country borders, there can be large variation in the naming conventions, and it is undesirable to replicate this in Axon:

- It doesn’t help the enterprise fully understand the expectations of such stakeholders
- It increases the administrative burden of managing Axon
- It makes the challenge of creating and executing Workflows complex
  - Remember that workflows are based on stakeholder roles.
  - Managing change is a key aspect of DG and needs to be executed in a clear simple way.
    - e.g. if you have multiple role names for ultimately similar functions, you may need to involve all in your pre-set workflows. This in turn means that you might need to ensure all such roles are assigned and accepted in Axon to ensure that your workflows execute smoothly.

As ever, when creating your stakeholder framework, **Less is More**:

- Create as few roles per facet as you can - you can add more later if you have to.
- If necessary create a mapping for all the roles in your organisation - think about whether the role is one that could be classified as an Ownership, Authority, Stewarding, Subject Matter Expert type of role.
- Remember that roles in each facet are visible to all editors, so Admins should consider mentioning these mappings in the role description (which appears as a pop up in an object’s stakeholder grid).
For the reasons outlined above, the general shape of the pre-populated configuration Axon ships with (v5.3 onwards) is:

<table>
<thead>
<tr>
<th>Role</th>
<th>Permissions</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;facet&gt; Owner</td>
<td>View</td>
<td>Ultimate responsibility for the asset but not involved in day to day maintenance, except perhaps workflow approval</td>
</tr>
<tr>
<td>&lt;facet&gt; Steward</td>
<td>View / New / Edit</td>
<td>Manages content day to day, handles enquiries and most workflow activity</td>
</tr>
</tbody>
</table>

Some organisations we have worked with do not like to use the otherwise common role of a ‘Steward’ - they would argue that everyone is involved in stewarding activities. SuperAdmins can easily change these role names.

Role Permissions

As you define the names, the permissions you need to assign should become clear. You’ll need to give some consideration to how many people might be assigned each type of role, to assess how many of your licences will be taken up.

- Admins can see the current position of licences used (and who is using them) in the Admin panel

Most Axon users have the user profile of WebUser. A profile is a type of user account within Axon. IT should not be confused with the different ways of interacting with Axon, summarised in the picture below.

In this picture Axon users who are either Viewer-only or Editor users (2nd/3rd columns) are typically all WebUsers. The intention of each Profile is as follows. Note that no other profiles
are available in Axon. Refer to the Functional Basics section earlier for a detailed discussion of how each affects your user licence.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Number</th>
<th>Purpose</th>
<th>Licence Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuperAdmin</td>
<td>Very</td>
<td>Full control of Axon objects and configuration. Expert users, chiefly from business, although technical user may also be needed to support integration menus.</td>
<td>Yes</td>
</tr>
<tr>
<td>Admin</td>
<td>Limited</td>
<td>Expected to be local experts in certain topics, who can assist WebUsers day to day. Admins have limited super user permissions to help address/fix small issues.</td>
<td>Yes</td>
</tr>
<tr>
<td>WebUser</td>
<td>Most users</td>
<td>No permissions on objects by default, but can interact with objects in Axon, contribute and ask questions.</td>
<td>Not by default but can - If assigned stakeholder roles on objects, counts for licence of the role has new or edit permissions.</td>
</tr>
</tbody>
</table>

**Everyone Is An Admin?**

In the early days of deploying Axon, when few users have been populated in Axon, you may have enough spare licences to be able to temporarily allow everyone in the project team to have the **Admin** profile:

- Do not make everyone a SuperAdmin (your IT policy probably won’t let you anyway)
- Being an Admin user has the advantage of letting everyone get used to Axon and lets them add and edit early content without Axon permissions affecting their ability to do this, as they would if they all had **WebUser** profiles.
  - Clearly this should not be actioned if content security is an initial use case under test.
- As you roll out Axon to more users you’ll need/want to bring this back towards the more normal situation of most users having access to only the assets they should curate via the WebUser profile.

If you do make everyone an Admin for a while, just bear in mind that this affects what they can see - we talked earlier about the ways in which duplicate/erroneously loaded content can be suppressed from view in Axon (using **Axon Status = Deleted**). Admins can see all this content by default, so may need to use searches to hide it from view.

- This is especially important when conducting Show and Tell meetings to update stakeholders on progress adding content - you may choose to create a WebUser account for such meetings.
Enterprise Glossary

It is largely impossible to manage any DG initiative without a set of agreed definitions that can be used to relate and connect everything that you'll eventually record. As such, one of the first actions should be to create a list of **usable** definitions within Axon that can be understood by the average employee/Axon visitor.

**What does Usable mean?**

Simply put, anyone in your organisation should be able to get value from a glossary. If they can’t, they’ll visit a couple of times, and then revert to whatever they used to do - this section contains advice on how to avoid that scenario.

What is a Glossary?

- A reliable, accurate and actively managed list of terms and concepts in use in an organisation.
- It should help users understand the definition and application of individual concepts, so that the user knows where its usage and purpose is relevant.
  - Without compromising the definition, it should be as brief as possible.
  - Clarifying what it is NOT can be a powerful element of the definition, especially where common misconceptions are known/expected.
- A glossary is typically hierarchically structured to provide an intuitive way for users to find terms.
- There may be multiple glossaries in use in an organisation – typically local users can only see the one most relevant to their role/department - an enterprise glossary seeks to consolidate this knowledge:
  - In one place
  - Removing the inevitable (and often considerable) overlaps
  - Using a structure that makes sense at an enterprise level, not simply a replication of the existing glossaries

Whatever it is known as in your organisation (Glossary / Data Dictionary / Taxonomy / Ontology etc), an enterprise glossary should ideally have the following characteristics:

- **Clear and Unambiguous**: A collection of well described entries that help users understand meaning and application.
  - A glossary is no place for heavy use of jargon/technical language – this has its place for those that understand it, but will always be a barrier to engagement for the majority of people those that don’t.
  - You may find that Axon has additional, separate fields for capturing more complex aspects of a concept.
- **Usable**: Easy to get value from, intuitive to search, read and use.
- **Hierarchical**: a common sense structure/order makes it easier for users to find terms, and to add new terms in an intuitive way.
  - *It also adds context* to the description of the object.
● **Unique**: Duplicate terms cause confusion - which is the right one to choose?
  ○ You may find situations where the same term is used in different areas to mean totally different things. Such instances need to be exposed and contrasted so users clearly understand when the can/cannot use each term.
  ○ Even where the duplication seeks to show the same definition applies in another context, this can be confusing.

● **Flexible**: the glossary has to cover a large range of themes, concepts and activities
  ○ As you’ll hear us say time and time again, user adoption is more important than anything
  ○ As such we do not support any particular modelling ideology for glossary construction, so be prepared to compromise on rigid adherence to a given model when constructing your Axon Enterprise Glossary

Common Challenges and Recommended Solutions

Based on the previous discussion, we’ve noted some actions we commonly advise against, or have helped clients unbundle where attempts were made to go beyond:

1. Information about technical joins and technical relationships is rarely suitable candidates for such a glossary.
   a. They are often found nested in structured glossaries, with more relevant business terms and concepts sitting at a higher level.
   b. Whilst invaluable to technical users supporting the business community these terms rarely mean anything to business users. Including them can add a lot of unnecessary content to Axon. This can often be a barrier to adoption - such content scares people off!
   c. Where this occurs, consider ingesting only the higher level objects that have more general application.

2. Disambiguate literal duplicates (same name, totally different *things*)
   a. Where you find these, do what you can to help users understand the right way to go. Ensuring a good description is a good start, but persisting literal duplicates that reference different concepts is not supportable in the longer term. Even if you can’t make all the required changes now, make a plan to address them and follow up as soon as you can.
      i. Add a suffix to each name, for now, to help clarify?
      ii. Maybe now is the time to adopt clearer names and break from existing practices for the greater good?
   b. Note that where you cannot change the naming to disambiguate, Axon gives users contextual clues that may assist:
      i. The picture below gives some examples.
      ii. Note that when using bulk upload files to create content/relationships you may need to tell Axon the parent to avoid the upload failing.
         1. Even if you cannot disambiguate the original name, the Name / Parent constructs must be unique.
In Unison grid, the parent is shown

When creating relationships in the Impact tab, the search box returns the results with parents in parenthesis

3. Clarify Conceptual Duplicates
   a. It is highly desirable to describe the same concept under one term that everyone accepts... but it’s difficult to make this happen in a short period of time
   b. Creating two separate definitions that appease different communities is not a good solution - where users are presented with two possibilities, relationships will be made inconsistently between each, and user confusion will not help Axon adoption.
      i. You also lose one of the key benefits of aligning everything to one term - getting enterprise visibility of all activities that are supported/relevant to this concept. Where all contributors relate their assets to the same central Axon glossary objects, you’ll quickly build up a holistic view of how the same concepts are applied in different parts of your organisation.
      ii. Many clients have accepted that multiple entries will inevitably occur and have developed Axon workflows to help users address this, and work to unite the descriptions, when discovered.
   c. Use of the Alias feature in Axon allows you to create and maintain one definition, and record all recognised names for the concept.
      i. Current functionality in both Unison Search and Quick Search allows users to search for the term they recognise, but for the ‘official’ name of the term to be returned.
4. Multiple entries of the same concept. The next issue we’ve seen clients try to address is where a glossary has been created by rigorously following some form of modelling convention. We’ve observed that the duplicates found therein are simply repeated statement of exactly the same concept, due to modelling rules.
   a. It is highly desirable and strongly recommended to have each concept described only once in an enterprise glossary, for the same reasons covered in the previous point on Conceptual duplicates.

5. Glossary Unification. Ingesting multiple glossaries invariably has a huge overlap of literal and conceptual duplicates. This has to be addressed (again, same reasons as laid out in 3 and 4 above), and the sooner you can do this, the easier it will be for everyone.
   a. Naturally some group or individual will have to manage (and referee) this process. There will invariably be inter-departmental politics and disagreements about which name should be adopted as the organisation standard.
   b. In practice it’s more likely that unification will happen in stages - you’ll use whichever glossary that makes sense for the initial data load, and then be faced with the task of ingesting subsequent glossaries as new initiatives require other glossaries to be ingested.
      i. When consuming additional glossaries, be flexible about the structure of the emerging Axon glossary. Be prepared to adapt the structure to fit new needs. Use the parent/child relationships to create meaningful divisions/subdivisions that make it easy to place and find new categories of terms.
Characteristics of good Glossary definitions

- Brief and to the point. Wordy definitions may raise more questions than they answer (assuming that users can even be bothered to read them). Unnecessarily large tranches of text are a barrier to engagement and adoption.
- Unambiguous. Definitions need precision: state what is covered, and what is not.
- Clear about the use and the purpose.
- Written to define the concept rather than just the word.
- Should reference other concepts where necessary to provide context.
- Use an absolute minimum of jargon/technical terms, abbreviations and acronyms.
- Able to avoid using the term that is being defined.
- Practical - offer examples.

It has also been said that one characteristic of a good glossary steward/owner is to be open to challenge and feedback - if you get feedback from the community, be prepared to adapt. Once again, pragmatism over purity has been found to lead to greater user adoption.

Identifying Key Data Elements (KDEs)

When creating their glossary, many clients wish to identify which of these assets are KDEs. Axon has always allowed identification of such assets within the context of data critical to Process objects.

From v5.4 onwards KDEs are no longer inferred from the relationship to the glossary, but exist as a dropdown on a glossary object. This allows you identify the glossary as a KDE, or variant e.g Group Level KDE, Local KDE by configuring such values in the Admin Panel.

Managing Glossary Definition & Evolution

A common requirement for Axon is to track and identify the maturity of glossary definitions. Axon manages these different stages through the use of the Lifecycle field, which appears on the Summary tab of almost every facet and object.

Definitions often evolve as follows (with suggested Lifecycle values from Axon defaults, clients often have their own versions). Note that whilst the Lifecycle states shown below must currently be set manually, we are working to automate this as part of an Axon workflow.
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Suggested Lifecycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The need to describe a new concept is established</td>
<td>Proposed</td>
</tr>
<tr>
<td></td>
<td>A local expert (often a Glossary Steward/SME) is tasked with initial definition</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Draft is peer reviewed and checked with community</td>
<td>Proposed</td>
</tr>
<tr>
<td>3</td>
<td>Revised draft is submitted for formal approval. How this happens varies but typically follows one of two paths: 1. Approval through some formal body (use the Axon Committee facet - see below) 2. Evidence of the peer review above may be enough to publish a workable definition</td>
<td>Awaiting Approval</td>
</tr>
<tr>
<td>4</td>
<td>After formal acceptance of the definition, the term is recognised as fully approved.</td>
<td>Approved</td>
</tr>
<tr>
<td>5</td>
<td>Any further revision of the term as needs evolve may require that Lifecycle is changed to reassure the community that evolving needs are being assessed</td>
<td>Under Review / Awaiting Approval</td>
</tr>
</tbody>
</table>

Some users have been tempted to link every glossary object to the relevant committee object to show they should be involved in approving definitions. We do not recommend this approach, as the maintenance of the object connections involved would be onerous and give little value.

Use of Workflow

Both the initial creation of a definition and any subsequent amendments can be supported by an Axon workflow to ensure that all such requests follow the same approved process. Each instance of approval can be evidenced via a Change Request, which is permanently linked to the term, and will be found when the objects is searched in Unison.

- Where you use changing Lifecycle values to denote different states of maturity it is recommended to explicitly mention this in the workflow step description to remind your stakeholders, thus ensuring compliance.
- Where a committee/body is involved in the approvals process, you may need to create a workflow step to allow for such approval.
  - Remember that workflows allow you to assign task to roles in the same facet
    - As we just said, above, we do not think adding a Committee stakeholder to every glossary object is a practical solution
    - Workflows don't (currently) support multi facet swimlanes. These are coming soon.
  - We find that the most practical approach is to create a step that allows the appropriate user (often the Glossary Steward/SME) to take the definition Awaiting Approval to the approving body.
- The Steward/SME can then update the change request with the decision, and as part of another step, change the Lifecycle accordingly
  - Another approach may be to use Unison > Bulk Update to change the Lifecycle values in one bulk action
- This action is only available to Admin/SuperAdmin users

<table>
<thead>
<tr>
<th>Example 1: Simplified approval workflow with Owner approver</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Step instructions state the Lifecycle value.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example 2: Simplified approval workflow, with Committee approval.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image2.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Axon and Data Models
Models have many advantages and bring rigour. However, expressing what’s actually happening needs to be more flexible.

Axon Glossary & Physical Models
- The Glossary captures data concepts in a system agnostic manner
- How those data concepts are being implemented in real systems, reports etc. is captured in the Axon Data Set and Attribute facets
  - These objects can in turn be linked to Glossary terms to show that they are manifestations of the concept in use somewhere in the organisation.
Axon Glossary & Logical Data Model (LDM)

- The Axon glossary serves as an inventory of data concepts
- Axon glossary items can be linked to other glossary items to capture meaningful semantic relationships.
- Typically different data domains are contributed by different business communities with different parts of the glossary being at different levels of maturity.
- In a logical model the consistency of representation and structure are paramount. The model stops being a model without it. The Axon glossary can reference logical data models.
- Unlike a model, there is no right or wrong for the Axon glossary. **Clarity and adoption are paramount, not the purity of the model.**

The Axon Approach

<table>
<thead>
<tr>
<th>Don't model</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Adoption is the objective</td>
</tr>
<tr>
<td>Create a usable glossary - It will evolve as it gets used</td>
</tr>
</tbody>
</table>

Creating Lineage

Another common requirement is to see how a collection of data points interact with each other, and what happens to them as they move between systems, tables, spreadsheets etc - are they copied, transformed, aggregated? A core feature of Axon is to deliver this understanding and clarity. In this section we’ll talk about the basics of lineage.

- A later section on integrations will show how this process can be made easier to both discover and ingest the flows.

Before we discuss how to bring this all together some comments on individual pieces of lineage.
Interfaces vs. Attribute Lineage (or Dotted Lines vs. Solid Lines)

Axon lineage maps contain two different line types.
- Dotted = Interface
  - Dotted lines indicate that an Interface has been created between two objects
  - It does tell us that two systems ‘talk’ to each other, and that information is exchanged between two systems, but doesn’t tell us the detail.
- Solid = Lineage
  - Solid lines tell us a lot of detail about each individual flow of data - each individual attribute that moves (we often call them ‘hops’) between two tables/spreadsheets etc. At each hop, the attribute could undergo treatments such as aggregation, transformation etc, so each hop has to be described individually.

Also note the arrows - lineage and interfaces are **one-directional** - Orion (lineage) and Adaptiv (Interface) are feeding information to CMD, and in turn CMD is supplying information to DWH and MCD AMS. If there was any flows in the opposite direction there would be arrow heads at both ends of the line.

Any line denotes that one or more flows exist - there could be many. Additionally, as we’ll show below, solid lines may be sitting on top of a dotted line.

**Interfaces vs. Lineage: when to use**

As we stated in the facet descriptions earlier, Interfaces are not always initially recognised/understood by business users as a concept worth recording.
- **Think of an interface as telling you how** data moves
  - It can give you a feel for what moves at a high level, through the Interface x Glossary relationship.
- **Good for creating a landscape of systems of interest, at the beginning of an initiative.** We call this **scaffolding** - a central team maps out systems of interest and the known interfaces between them to give others a feel for the boundaries of the initial data collection exercise.
Client usage varies
- Especially where the transfer of data is IT supported, and happens automatically, multiple interfaces may be created between the same two systems, each supporting one specific purpose/process.
- Alternatively you may choose to represent interfaces with fewer interfaces, as the interface may simply show that two systems can exchange data automatically.
- The typing of the Interface also allows you to represent e.g. manual transfers of data.

Consider the picture below - the CMD system is a key source of data for many other systems - lots of solid lines tell us that lineage has been described, and can be explored (e.g. via the linking attributes overlay).

However, although we know what data is flowing around, we don’t necessarily know how this is facilitated. If we change the filters on the map above to exclude lineage and only show interfaces, we find the map above becomes the map below;
This demonstrates how we use attribute linking to show what data flows around the business, and interfaces to show how this happens. These two pictures show us that in this case we know a lot more about what data is flowing than how it gets there!

- When describing data lineage, either when creating or in subsequent edits, users can assign each individual line of lineage to a given interface. The screenshot below shows a story of two attributes (Revenue and Cost) from different source tables (in the same System A) coming together in a third table (found in System B) to calculate Profit. The transfer of data is supported by the same interface.
  - The picture shows the Attribute Bulk Upload file, with the interface selection fields highlighted.

Creating Policy, Process & Project Objects

The information in this section applies to the creation of objects in the Policy, Process and Projects facets - the same considerations should be used to decide how to load this content.

These facets are important in Axon because they often give the context to why data is flowing around your organisation - they capture the key business imperatives. The key design considerations are:

- Decide on the right level of granularity
  a. Creating one object to describe e.g. a process allows users to see it and relate their assets to it.
  b. However, is that enough detail? Only you can decide what’s right in your organisation, but you’ll need to relate every asset to the same object. All these facets are hierarchical, and that allows you to break things down into more detailed elements that may allow relationships at a more valuable level, for example:
    i. Policies: split into major clauses
    ii. Processes: Detail all the steps on e.g. a Visio diagram
    iii. Project: split into sub-projects that deliver the wider project
  c. Finding the detail
    i. When visiting any object in such a grouping you’ll find a Components/Relationship tab which details the other relevant objects. These maps have overlays that show dependencies where they occur, which may be more useful than against just one object.
    ii. In Unison Search, do a Keyword search for the top level object, and add in a Filters > Children search condition to return all relevant objects. This isolates just this collection of objects and everything they have been related to in Unison.
Granularity Example 1 - splitting a policy into major elements. The Hierarchy grid allows users to see the detail. Project objects also have this view.

Granularity Example 2 - describing process steps shows a components map.

Defining a Key Data Element (KDE)
In the Process facet a default Process x Glossary Relationship Type of ‘Is KDE of’ is available to denote that a Process object is highly dependent upon a given Attribute.

In v5.4 we’re changing the way that a KDE is identified in Axon, as described in the Glossary. You’ll still be able to use the relationship described above, but it no longer changes the Unison > KDE field to True.

Relating Assets Together
We introduced Axon relationships in Chapter 2 when we talked about functional basics. Creating relationships between Axon objects is the key to providing context and visibility for why objects are dependent/affected by others. Have you noticed that when you search for something in one facet, Unison Search returns relevant objects in other facets? This is because the community has made these links - as the community create their own stories and state their dependencies, we build up an organisational level view not available anywhere else.
Relationships Are More Meaningful Than Descriptor Fields

This is one of the key design principles of Axon, so please ensure that you understand the content of this section. We'll also cover the frequently asked question of custom fields. To better explain this idea, let's explore a real example, and one of the most commonly asked questions by clients establishing their GDPR framework.

Clients have often asked us why we have not made a ‘PII’ (or Personally Identifiable Information) field available on glossary objects so that they could easily identify them. The first reason is that ‘PII’ is a concept specific to one single use case, which won’t necessarily be relevant to every client.

Far more important, however, is that we believe that a simple descriptor won’t help you enough. If you’re not familiar with the GDPR Use Case, knowing which (PII) assets fall under the impact of this regulation is a key part of designing the GDPR response. Just stating that an object is PII has limited value - it doesn’t tell you why it is relevant as PII. If you add this context through a connection (in this case to a policy object):

- You know which part(s) of the regulation will affect the object..
- ..so you have less work to do later if parts (“Articles” in GDPR terms) of the regulation change.
  - You’ll already know which policies are affected by changes.
  - And the relationships tell you which other Axon assets are affected.
- Only using a simple PII field will give you a much larger set of assets that need reviewed each time something changes.

We illustrated this with a common example. We typically find that when clients ask for dozens of custom fields, that only a handful at most are actually required, because most requirements can or should be addressed with relationships.

How To Create Relationships

With very limited exceptions, relationships are created in the Impact Tab of an object:

- Some relationships are created by dependency - when creating an Attribute, Axon requires the Data Set it is found in.
- Some relationships to glossary are made on an objects Summary tab, but these will eventually move to the Impact tab.

Relationships tend to be created in one direction only, because it makes more sense e.g. a Process can state a dependency upon a System, but System editors cannot (would not want/need to) make such a relationship to a Process.

Axon ships with a basic set of relationship types. We encourage users to create more diverse sets of relationships to suit their governance program. Note that these will soon be searchable in Unison Search which will increase their utility.
Creating relationships through the Axon interface/Bulk Upload is straightforward. Most are one-step, data sets and attributes require further steps, as described below.

Standard Relationships

For most facets, linking is a simple one-step process. In Edit mode:
- Select the Impact tab
- Select the appropriate sub-tab
- Choose the appropriate Relationship Type, that best explains why you are connecting the object.

Relating Assets to Data Sets & Attributes

For Data Sets and Attributes there are additional steps, based on the intersect of system and glossary objects. This is because of the complexity of names found in these facets that may not always help users fully understand the linked assets. Find the following values and make two connections in the Impact tab:
- The System the asset resides in.
- The Glossary object associated with the asset.
  a. Data Sets: System and Glossary are mandatory fields in the creation of the asset - obtain these values from Unison / the Data Set object
  b. Attributes: Associating a Glossary object to an Attribute is an optional (but recommended) activity, using the Attribute x Glossary relationship. Attributes without this relationship cannot be linked to a process/policy/project.
    i. See the later section on the Data Discovery Tool for ways of managing attribute x glossary links

Relationships vs. Custom Fields

In this section we have covered how we respond to questions about a specific ‘PII’ field, and we hope that we have demonstrated that you’ll get more longer term value from creating relationships. Clients often have a number of fields they would like to see described in Axon, but cannot see an obvious place for it. We’re happy to work with you on this, as we feel it’s a lazy answer to create a custom field for many scenarios...never mind that Axon 5.4 doesn’t support custom fields. We will soon deliver these as an option for clients.

Data Quality

Axon displays Data Quality (DQ) at two levels:
1. Standard DQ Rules, captured in the Glossary facet - these are recommendations on expected measurement of attributes associated to that glossary term.
2. Local DQ Rules. Captured in the DQ facet, these are associated to individual attributes and measure different Types of DQ rule, such as Accuracy, Completeness etc.
There is a wider discussion of DQ rules in a later section that deals with integration to the Informatica Data Quality (IDQ) tool.

Local DQ Rules

Typically users are more interested in documenting Local DQ Rules when they start working with Axon, and this is fine - it helps generate engaging content that informs and excites the community in the early days. By attaching DQ measurement scores to attributes, this information appears in map overlays and dashboards (see below) whenever those attributes are part of Unison Search results. Both pictures are for the same Unison Search.

![Pic 1: Lineage map with DQ overlay](image1)

![Pic 2: DQ facet dashboard.](image2)

Unison shows that only 25 of 280 rules are relevant to the active search, dashboard shows results for only those 25.

Standard DQ Rules

Unless these are expressly of interest to initial Use Cases, description of Standard Rules tend to be something that users become interested in as their instance of Axon matures.

Standard rules are defined by the stakeholders of the Glossary object, and give recommendations to users on appropriate DQ measurements, for any attributes that are associated to that glossary object.

- Most users will tend to follow these recommendation in practice, but this allows individual data set stakeholders to make their own call about how they handle their own data. They may decide to subject their data to differing levels of measurement

Glossary > Data Quality Tab

The picture below shows a Glossary objects’ Data Quality tab. It shows two grids:

1. Standard DQ Rules - On ehas been described for Validity type rules

Rev 1.1
2. Local DQ Rules (which has been filtered to show Validity rules only)- these are local rules associated to attributes that have an attribute x glossary relationship with this glossary term.

3. Notice the first column in the local rule grid - the first three local rules have been aligned with the Standard rule, whereas the next three have not. This means they have been validated to be in line with recommendations.

4. Should another of these rules be deemed to be fully compliant with recommendations

Workflow

Workflows are prescribed steps that must be followed on a given order to achieve a particular goal. Users can configure multiple workflows per facet to achieve almost any goal. Some examples include:

- Definition approval
- Request to amend definition
- Query adverse Data Quality information
- ...or simply handles questions from the community

Consult the user guide for guidance on constructing workflows.

Default Workflows vs Custom Workflows

Workflows are constructed to run against the stakeholder roles available on each facet - the Steward and Subject Matter Expert might work together in a series of steps before asking the object owner for approval to implement changes to an object. If it important to ensure consistency and quality of decisions made, use workflow to describe what needs done.

Some workflows need to be available for any object in a facet, others are so specific in purpose that they’ll only ever be run against one object. Axon handles this as follows:

- **Default Workflows**: created in the Admin panel, these are available to any object in that facet.
- **Custom Workflows**: created by object editors within one object, these are only available to that object.

### Workflows & Change Requests

Any logged in Axon user can visit an object and raise a Change Request (CR) - this option can be found in the Actions button. When a CR is raised all the objects' stakeholders are notified of the new CR. Any one of them can view the CR and decide which of the available workflows the CR should be run against. Note that:

1. The Due By dates specified in the workflow do not start running until the workflow is started.
2. Once a workflow has started running, any edits to the underlying workflow will not be shown in the running workflow. These changes will only apply to new CRs.

### Managing Stakeholders

As you begin to start allocating roles there are a couple of useful features that are common early asks:

#### Monitoring Licence Usage

An *Admin* user visiting the Admin Dashboard page can see the total count of Licenced Users. The DG Operating Model has a list view that details all users currently contributing to this count.

![Admin Dashboard](image)

#### Bulk Acceptance of Roles

When creating content and assigning stakeholder roles you may find that some key people end up with many notifications of roles to accept (which remain in the Notification Centre until accepted). With steady state production instances this is rarely a concern and the volume is easy to manage.

To make this easy to manage make sure that you show such people that they can bulk
accept all outstanding roles, as shown in the picture below. Users need to select the roles in the grid before going to the Action menu.
Chapter 4 - Production Considerations

Everything discussed in the previous chapter about initial population of Axon is relevant to a new Production instance, so you may wish to review that chapter before continuing. Remember the *5 Principles of an Axon Implementation*:

1. Engagement & Adoption above all else
2. Think Big, Start small
3. Be guided by practical usage
4. Breadth over depth
5. Do not model

However, the move to production has additional considerations. These will be discussed here. Integrations with other products is a large topic, and has a chapter of its own following this.

Structuring & Staging Environments

You licence agreement allows you to provision as many instances as are required to satisfy your SDLC requirements, as long as they are used for the same purpose. Unless the SDLC requires more than two, start there. Suggested usage:

1. UAT / Sandbox Instance
   a. Testing major releases and bug fixes before committing new code to Production. Often also used for testing content for production.
   b. Probably has Single Sign On Enabled
   c. Typically does NOT have email enabled - Some clients have also set up email on multiple instances.
      i. See earlier comments on multiple instances sending emails.
   d. Probably has integrations for testing

2. Production Instance
   a. The instance exposed to the whole community
   b. Typically has Single Sign On enabled
   c. Typically has email enabled
      i. Axon can send users regularly scheduled emails about the activities they are involved in - each user controls their own settings
   d. Integrated with other systems, where applicable

We don’t currently support staging content, i.e. manually testing content in one instance, and if we’re satisfied with like it, moving just that part of the UAT content into Production. We are working on addressing this, based on customer feedback.
We have however observed that, in our view, some clients spend too much time preparing content in UAT and keeping it there until it is achieves some measure of perfection. This content spends a lot of time sitting there, shielded from a community that, given the chance, will both help improve it, and repeatedly find additional imperfections. Perfection is too high a standard, and user engagement is far more important. Let the community see it, engage with, and talk about it.

Lastly, we generally recommend that you’ll want to schedule a backup of production back to UAT on a regular basis so that any testing work can be performed on recent content. This backup will take all content, configuration and workflows with it.

Roles & Permissions (again)

In the previous chapter we mentioned that we’d observed that, in the early stages of an Axon implementation, clients often take advantage of the spare capacity in their licence allocation to grant all the initial project team the Admin profile. This can help make creating and correcting initial loads easier and quicker.

As you roll out your governance program and bring in more stakeholders, you'll probably have to change this arrangement - some of those stakeholders will have permissions that eat into your licence allocation. It may be that since this team are now expert Axon users, that they might retain the profile, to help new users with day to day problem solving. However, we assume most Axon users will be WebUsers, so that their ability to change content is limited by the stakeholder roles they have been assigned.

Monitoring & Measuring

DG programs are notoriously difficult to measure in objective terms - it's difficult to count up the number of times effective DG stopped ineffective changes being made, or that caught some gotchas before they manifested themselves etc.

Some tangible examples of measurement that clients have included in measurement efforts revolve around simple counts - searches that monitor some aspect of the projects you are running, or the overall effect on the Axon instance and community of users. Once created, searches can be saved, even shared with other users, so that the results are easily rerun. A collection of counts can be recorded on a regular basis to monitor community engagement.

Such counts include:

- Objects with one/more/specific role type stakeholders.
  - Or, perhaps more importantly, objects currently without any stakeholders.
- Roles - accepted-awaiting acceptance.
- Attributes with/out glossary relationships.
- Attributes or Data Sets subject to DQ measurement.
Where clients record many such statistics, it can often be more convenient to run these as queries through a BI tool connected to a copy of the Axon database.

Advanced Features for Mature Users

Axon includes some features that are unlikely to be relevant for new users of the tool. However, as the DG initiative settles down into steady state operation the relevance and value of these features may become apparent. This tends to start happening anywhere from 3-9 months into the project, as these features benefit from larger volumes of content.

Data Discovery Tool

The Data Discovery Tool is a lighter version of the Glossary Rules Engine found in the Admin Panel. The Data Discovery Tool (DDT), can be found in the Data tab of any glossary object. It can be used to create pattern searches that look across all Axon attributes, and allows the users to find any attributes that ought to be associated to that glossary object.

We’ve mentioned a few times in this document that, whilst optional, this relationship between Glossary and Attribute allows users to see real examples of conceptual glossary objects in action around the business. We do not mandate the relationship because that can cause practical difficulties in early data loads (and not every attribute has/needs an association). However, as your Axon instance becomes better populated and more relied upon, the need for this link between attribute and glossary often becomes clearer. The DDT can help you fill all the gaps.

Scorecards

Both the Data Set and Glossary facets have a feature on the Summary tab that shows a scorecard for the object. This summarises and scores all the data collected in that object.

Glossary Roll Up

In the Actions button for any glossary object you can find the option to Roll Up - this will summarise many aspects of the object AND all the child objects in the hierarchy below it.

New Release News

The best way to get information on new releases is via Informatica’s SupportFlash newsletter, which is emailed to you every month. Subscribe to this via the Informatica Network > Support Documents > SupportFlash Archive
Chapter 5 - Making Integrations Work

Before making a plan to integrate it’s crucial to understand why you are doing it, and what you’ll get for it. Data Governance cannot be fully automated. However, automation and integrations with other tools can certainly make managing content easier day to day.

Integrations with Informatica Products

Out of the box, Axon integrates with 3 other Informatica products to support various data governance scenarios:

1. Enterprise Data Catalog (EDC) - provides a machine learning-based discovery engine to scan and catalog data assets across the enterprise—across cloud and on-premises, and big data anywhere. EDC integrates with Axon to automate processes for acquiring data assets through scanning and discovery, assess their criticality to the data governance program, and onboarding them into Axon so they can be brought under governance.

2. Data Quality (IDQ) - empowers your company to take a holistic approach to managing data quality across the enterprise. The software transforms your data quality processes to be a collaborative effort between business users and IT. IDQ integrates with Axon to automate the measurement of local data quality rules, which can be measured directly against the physical store corresponding to the Axon System/Data Set, through IDQ Rule-based Profiling and Scorecarding.

3. Secure@Source (S@S) - discover and remediate sensitive and critical data risk across your organization. It leverages artificial intelligence (AI) and machine learning to deliver actionable data discovery and classification, risk scoring, behavioral analytics, and automated protection in a single solution. S@S integrates with Axon to measure the state of data protection and risk for sensitive data types, such as Personally Identifiable Information, and report that back to Axon stakeholders for the Data, Systems that house that information, and for the Policies that determine the organization's data protection policy framework.

Strategies for using these will be discussed in this chapter.

Axon can also connect to other data sources, data profiling and data quality measurement systems. This is typically done via EDC, and we’re also introducing APIs. The list of available APIs is being extended through 2018 and beyond, and those currently available are discussed below. The principles of how and when to use EDC and DQ are equally applicable to APIs.
1. Informatica Enterprise Data Catalog

A commonly asked question is why a client might need both Axon and EDC. The answer is relatively simple:

<table>
<thead>
<tr>
<th>Axon should be used to inventory key data elements (KDEs), as defined by the organisation's data governance practice, informed by the data used in their critical business processes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC should be used to inventorise all available/scannable assets found anywhere in the organisations’ cloud, big data, databases, file shares and BI tools, through EDC’s broad inventory of interfaces for connecting to, scanning and inventory the data content of these resources</td>
</tr>
</tbody>
</table>

The key difference between the two is that EDC should very quickly accumulate a lot of content, irrespective of the value/usage to any one community within the organisation. A determination of the usefulness of a given asset can only be made if a user can find and understand it.

Axon however, should be populated with more consideration and discrimination, in line with what the business say they need to run key day to day activities. This of course means that Axon will have a lot less content, much of it a subset of what’s in EDC, or an aggregated view..

By searching EDC for key concepts we’ll learn where they exist in the landscape - that may be needed to inform Axon users where their content is stored/generated/available. However, just because something is available, doesn’t mean it’s an approved source for a given task, so in turn does not mean this should be shown in Axon.

In fact, we sometimes say that if Axon has ingested more than 10% of the content found in EDC someone is working too hard…this of course is a broad generalisation, and doesn’t hold for every use case. Some initiatives, such as Reporting, or BCBS 239, may result in far more content being shared from EDC to Axon.

**EDC Interface in Axon**

Anytime an Axon user accesses the Enterprise Catalog menu in the toolbar an updated list of scanned assets is displayed. Available assets are held in two menus:

1. Resources (Axon = Systems)
   - List of relational and file resources that have been discovered by EDC
2. Fields (Axon = Attributes)
   - Fields are columns in discovered Tables
An EDC Table is a more conventional form of technical table, which conforms to a subset of the uses described above for an Axon Data Set

Changes to EDC may change this in the future. However, don’t expect everything to be discoverable this way, DG needs to be more flexible than systems allow

- If linked to Glossary concepts in EDC this will be ingested into

As the picture below shows, if a Resource/Field has already been linked to an Axon object, this is shown in the table.

Note that

- The Search filters can be used to find objects of interest - in the Resource menu the Keyword menu and Resource Type can be used in conjunction to find assets of interest, in just the same way as the main Unison Search tool.
- Application vs System < to be completed >
  - Multiple Resources may be seen as being the same system in the minds of the technical community, less so by the business (who don’t see this /know about it /care, as long as they get what the expect)
  - The business community will often only understand the bit that they get data from, so consider only ingesting these assets into Axon

Ingesting Content from EDC

A quick guide to pulling in assets from EDC will, follow. Consider the following before you attempt this:

- Whilst EDC is also a business facing tool, the content can be more technical than Axon. Users may need assistance from e.g. Business Analysts to make the right decisions on assets to pull across.
- Remember to be discriminatory in what content you select. EDC is the right place to find things, Axon is only for the assets identified as key to business activity

Ingesting Resources

If we wish to pull an EDC Resource into Axon, do the following:
Select the item by clicking in the grid row (avoid hyperlinks when you do this), and then either:
● Select the Search dropdown
● ..or just right click on the highlighted row
..and select Manage Linking.

This will trigger a menu that allows you to either:
1. Associate the Resource to an established Axon object
2. Clicking the Create button will trigger the Axon manual create screen, and you can fill in the usual fields to create a new system.
   a. Upon successful creation of the new system object the EDC resource and the Axon System will automatically be linked

Ingesting Fields
The functionality for Fields is very similar to Resources, although there are additional considerations:
● Many Fields (Attributes) in a Table (Data Set) have little relevance to the business - either because they are boolean flags used by the IT team to support logic, are extra (unnamed) fields to support possible future needs, or just aren’t ever populated.
   ○ Hyperlinks into EDC can help you understand these fields to make a call on their suitability
   ○ Fields such as these are unsuitable for Axon, because they do not help business understanding.

The Fields Menu has the following columns:

<table>
<thead>
<tr>
<th>Name</th>
<th>Name of the Field (and potential Axon attribute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Type of source field (csv column, JSON field, XML Field etc)</td>
</tr>
<tr>
<td>Parent Name</td>
<td>The Table it was found in (potential Axon Data Set). Note the advisory message in the screenshot.</td>
</tr>
<tr>
<td>Resource Name</td>
<td>Resource Name (potential Axon System)</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Status</td>
<td>Three options:</td>
</tr>
<tr>
<td></td>
<td>Reported: Found, not associated</td>
</tr>
<tr>
<td></td>
<td>Associated: Already associated to an Axon asset</td>
</tr>
<tr>
<td></td>
<td>Ignored: &lt; add definition &gt;</td>
</tr>
<tr>
<td></td>
<td>Objects can be set/undone as ‘Ignored’ by selecting the row and using the search dropdown or right click menu</td>
</tr>
<tr>
<td>Linked Glossary</td>
<td>Glossary link already firmly established to an established Axon Glossary object. This is reported from EDC when:</td>
</tr>
<tr>
<td>&lt; logic to be confirmed &gt;</td>
<td>1. The Axon glossary has been ingested into EDC</td>
</tr>
<tr>
<td></td>
<td>2. Mapping activity undertaken there.</td>
</tr>
<tr>
<td>Inferred Glossary</td>
<td>Inferred Glossary appears for fields that have an EDC domain mapped to them, and the domain is mapped to an Axon glossary term.</td>
</tr>
</tbody>
</table>

Multiple Fields can be associated to the same Axon data set in the same step. To select multiple Fields either construct a search that returns only what you need or simply click on each row from the grid (again, avoid clicking hyperlinks when you do this), by holding down the Control key as you select each row, and select **Manage Links**.

As with Resources, users can choose to associate them to an existing Axon Data Set, or create a new object to hold them
- Remember that you’ll be asked to enter an Axon glossary term (that best describes the business activity the Data Set supports)
You can then finalise the names you wish to appear in the Axon Data Set - EDC suggestions can be overwritten, e.g. if more business friendly names can be used.

Axon to EDC - Glossary

Current functionality allows the Axon glossary to be ingested by EDC. Once there, it can be connected to EDC assets to help classify them.
2. Informatica Data Quality

An Informatica consultant was helping a financial services client understand the lineage that delivered a key regulatory report. Using Axon, it exposed and described all the data flows from around the client’s systems. It was a nice concise piece of work that would really help people in the company understand how things worked.

There was just one problem. Around half of the people that attended the lineage show and tell meeting weren’t impressed - they didn’t disagree with the lineage at a meta-data level, they simply didn’t trust the actual results that were to be submitted to the regulator. The other half of the attendees didn’t understand/accept their concerns.

It was clear that the lineage of such a key business activity would be subject to quality analysis. Indeed the company had a rigorous approach to profiling and measuring. As such, the obvious action was to source and map the Data Quality story onto the lineage.

One week later, everyone got back together to see the results.

The result: everyone was right! How can that be?

Specifically, some of the lineage had satisfactory DQ scores, but other elements didn’t. Axon’s lineage map clearly showed what was good/bad. This let all the stakeholders understand everyone else’s perspective. Upon investigation it emerged that the DQ team were fully aware of the adverse scores, and naturally had tasked it all for remediation. They were able to show a long list of active remediations.

The elements forming part of the regulatory report were not all highly prioritised on this list. Axon was able to show how serious a risk the company was exposed to (understandably, regulators don’t appreciate being given bad data), and the remediation tasks were immediately elevated in the list of remediation priorities. It wasn’t long before everyone understood and trusted the end to end lineage and DQ.

So why had the company not fixed all this sooner?

- The company was actually very good at profiling & measurement...but...as it turned out, that was part of the problem - when you analyse everything you lose sight of what’s actually important.
  - In other words, until introduced to Axon, the remediation team were busy addressing issues without any assistance to assess their portfolio with a lens that could inform business priorities.
- Axon should be used to let the business express what’s important to them, not to inventorise every asset the company produces
  - Ask yourself (or your key stakeholders...): what do we care about in the organisation, what are my Key Data Elements?
  - Once you have these in Axon, you can then bring your data quality tools into the picture.
So with that in mind, let’s look at how Axon and IDQ can work together to measure and share the right Data Quality information.

The Axon View of Measurement & Data Quality

Axon can show different aspects of Data Quality, at two levels. Let’s first cover what these are, and then relate this to the activity of DQ measurement.

1. Local Data Quality Rules
   a. Actual measurement of DQ types (also known as dimensions), e.g. Accuracy, Completeness, Validity etc. These are typically reported with scores and using Red/Amber/Green colouring to indicate acceptability of these scores vs expectations (targets and thresholds)
   b. Each of these rules is linked to specific attributes, recorded in Axon Data Sets
   c. These link directly to DQ measurements, wherever they are made...from results generated in a DQ profiling system, such as IDQ, or from an analysts script

2. Standard Data Quality Rules - expressed at the Axon Glossary level
   a. The Glossary expresses key concepts and definitions for the organisation
   b. The definers/owners business owners of these terms can indicate the desired types/levels of measurement that real (physical) examples of these concepts should be measured against

The Data Quality Measurement Process

If we consider the previous section in terms of how organisations typically develop their measurement, we can see how Axon compliments this:

<table>
<thead>
<tr>
<th>Informatica Data Quality</th>
<th>Informatica Axon</th>
</tr>
</thead>
<tbody>
<tr>
<td>A business user typically specifies a rule that needs measured in plain, non-technical language. This could e.g. be specified in IDQ’s Analyst web interface (rules specification), or in a spreadsheet</td>
<td>This is similar to Axon’s Glossary &gt; Standard Data Quality Rule. We cannot make links between Standard Rules and IDQ rules yet, but we’re working on this. Standard rules are not linked to specific measurement, simply provide guidance/instruction on what would constitute appropriate measurement. In our experience, most users will accept</td>
</tr>
</tbody>
</table>
The DQ team will then turn these descriptions into an executable set of rules that are capable of reporting the score of rows that pass these rules.

These rules can be **mapped** against fields in any given table to generate a measurement. Rules report % adherence, and can be ingested by Axon.

Axon can also read *metrics* from Profiles, but does not ingest general profiling data such as frequency analysis, etc.

Whether it is a rule *mapping* or a *metric* from a Profile, these can be represented in Axon as Local DQ rules (Axon does not link to generic IDQ rules).

These Local DQ Rules are linked to Attributes in Axon Data Sets.

Each rule can have its own Threshold (IDQ: Acceptable) and Target (IDQ: Good)

Any other Axon objects (e.g. Process, Policy etc) that state a dependency on such attributes are automatically linked to the DQ score information from the associated Local DQ Rules.

Defects can be handled by workflows within IDQ, and assigned to e.g. Data Stewards to investigate the causes of unsatisfactory results.

Axon reports the latest scores, and the ingestion of automated measurement can be automated.

Any member of the Axon user community can interact with the stakeholder community about DQ, or any other aspect of governance, via Axon’s Change Request/Workflow feature.

## Aspects of Axon Data Quality Rules

Building upon the content discussed above, some specific comments follow. It should however be noted that, because of the precision required in Axon, any reference to an IDQ rule should be thought of as to a specific mapping, not to a generic rule that have many applications and measurements.
1. Linking an Axon Local DQ Rule to IDQ

As the screenshot below shows, the Axon DQ rule can be edited to associate it to IDQ. Select the Technical Rule Reference field to trigger a menu that shows what Axon can read from IDQ:

- Scorecards - individual rules within the scorecard can be linked to the Axon Local DQ Rule, not the scorecard as a whole
- Profiles - as mentioned above, Axon can ingest metrics from a profile that e.g. give completeness information (see IDQ literature for guidance on creating metrics)

Once the rule/metric is selected, users can then select a frequency

- Axon permits Daily ingestion of scores
- However, we do not recommend this, and most customers set this to weekly/monthly. Axon is not a substitute for regular reporting tools, given the overall scope of data we’ve recommended ingesting into Axon
- Note that special configuration is required to ensure that Axon can work with your instance of IDQ. See technical documentation for details re the ‘DQ Agent’

2. Relating Multiple Attributes to One DQ Rule

In edit mode, Axon Local DQ rules have the option of adding more attributes from the same Axon data set to the rule (Add Item in the screenshot below). This feature is used to show that there is some dependency between the fields. A common example is where e.g. a Start Date must be less than an End date.

- Note that when using Axon’s search features to isolate attributes, Unison cannot split the scores between attributes, and will report the same score regardless of which attribute is searched for.
3. Use of the Measured Against Feature

The previous screenshot also shows the measured against feature. Similar to the above example, this is designed to relate the rule to attributes in other Axon Data Sets, where there is a dependency. This feature is typically used for measuring Consistency-type rules.

Integrations to other products

1. Via EDC

The longer term vision for Axon is that connectivity will be via EDC. After all, EDC is the best way to catalog anything you can find. Using the guidelines in the earlier section we can use the Axon/EDC interface to carefully select the right objects for closer stewardship, and ingest them into Axon.

2. APIs

One other alternative - APIs. Axon is gradually publishing APIs available, which allow connections to individual facets from client resources. Currently available in v5.4, for read-only access to Axon, are as follows - other facets and update capabilities will be introduced soon (check release notes for new additions):

- DQ
- Process

Naturally, when adding content via API the same principles apply - only bring in content that is directly relevant to your governance efforts. Technical support for APIs is available in the technical release notes, which can be found on the Informatica Network.
Chapter 6 - Common Use Cases

The intention of the Appendices section is to provide some specific advice for common use cases. It builds upon all the discussion in the main playbook, and gives some suggestions on how to construct content for some common governance scenarios.

Use Case: GDPR

The General Data Protection Regulation came into effect on 25th May 2018, and affects any organisation across the world that stores or processes the personal data of any European citizen. Given the fines involved, this has taken up a lot of time and thought in many organisations.

The regulation, published and enforced by the EU, compels organisations to carefully manage data relating to private citizens - control what they can capture, subject it to strict security controls (including which countries it is passed to as it flows around the organisation), and retain it for no longer than is necessary. In order to do this, companies will have to work out what data is subject to the regulation, understand how it is used and stored, then create appropriate business rules to ensure that they are compliant with the terms of the regulation.

If we break this down into Axon terms we could think of it as follows. Please also refer to an earlier section on why Relationships can be more powerful than descriptors:

- An external **Regulation** causes a company to think about its own response. This response will be documented in the **Policy** facet.
  - Most clients choose to capture regulation and policies in granular form, so that **Regulation x Policy** relationships are more informative as to which articles of the regulation drive which policies, processes - this will become more important later should the regulation evolve - you'll be able to more easily identify which specific elements of a policy/process are affected by a change in any given Article.
  - Typical required policies include those for transfer of data, security policies.

- Users will need to find personal data subject to the regulation, often referred to as Personally Identifiable Information, or PII. The best way to approach this is by linking the **Glossary** terms to the individual policy/process elements that affect them.
  - See **Relating Assets Together** for why we don't have a PII field in Axon.

- You can then show, using different **Policy x Glossary** relationships:
  - Data elements classified as PII
  - Data elements classified as Special Category
  - Data elements classified as Relating to Criminal Convictions

- **Processes** using personal data will also have to be seen to adhere to these policies. The process facet is at the core of showing how data is used.
○ **Process x Glossary** relationships help build the picture - this is the relationship that shows which data elements and personal data categories are being used in which processes

○ You can then show, using different **Process X Policy** relationships:
  - Purpose of Processing requirements - these must be established by each organisation.
  - Legal Basis for Processing, as specified by the regulation e.g. Consent, Contract etc.

○ By creating a meaningful list of **Business Area** you can then relate these to individual process steps to show the departmental responsibility/interaction.

- Assuming all **Attributes** have appropriate **Attribute x Glossary** relationships, you can then search on the conceptual glossary terms to find real examples of attributes and their lineage.

  ○ **Systems & Data Sets** can have ownership/access related to different **Legal Entities** - useful for showing where 3rd parties are used as Data Processors or Data Controllers.

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**Retention Policies**

GDPR requires that personal data is not stored for longer than it needs to be to carry out its particular purpose - this is in line with minimisation tactics. Once you have created the relationships described above, you may find that different glossary concepts have differing retention requirements in different scenarios. Also, don’t forget that these objects may also be affected by other policies and processes that are nothing to do with GDPR. It can be very difficult to work out what the maximum required retention period is. How to handle this?

We have observed that the organisational structure of some companies has allowed them to use Axon in an interesting way we had not anticipated. After a period of populating Axon and creating the right story for GDPR and other imperatives, a central committee reviewed the content, and worked out the net effect on individual objects. The committee then went through a process of creating and assigning additional Policy x Glossary relationships that stated the retention period.

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**Article 30: Report on Processing Activities**

One key requirement that is commensurate with GDPR is the need to satisfy Article 30. The content of Axon is best leveraged for this in tandem with a BI tool to extract the required information. We’re improving Axon capabilities all the time - please contact us to get advice on the latest way to address RoPA reporting.
Use Case: Regulatory Reporting

Many organisations have to satisfy regulators that they are operating appropriately. Financial services firms may fall under the requirements of BCBS 239, Insurance companies have Solvency II. There are many example in other industries. The typical requirement is to ensure that users trust the data is fit for purpose, and the processes that create the report are robust. Some regulations hold individual members of staff legally accountable for providing accurate data.

This activity typically happens on a regular basis. Axon can capture the details of how the report should be created if we needed to run it right now. It won't the answers to any given report, just the processes, lineage etc that creates the report. Some key themes that you may wish to consider are as follows:

- Start with the final report. Create it as an Axon Data Set, of Type = Report.
- Describe each data point contained in the report as an attribute.
- Tell the lineage story of how each attribute arrives in the report, working back as far as you need to.
  - Each ‘hop’, from one Data Set to another is an opportunity for the data to be changed, aggregated, sub-divided etc. Tell that story.
  - Where possible, ensure attributes are linked to glossary objects to help show where transformations cause the data to fall in/out of relevance with approved definitions.
- Data Quality is likely to be considered a mandatory requirement to build trust.
- Why are you doing this reporting?
  - An external regulation demands it - capture this in the Regulation facet
    - Perhaps add in the Regulator and applicable Geography information.
  - The Policy facet allows you to describe your organisation’s internal response to the regulation.
  - The Process facet allows you to detail any documented steps that are followed to create the report.
  - Policies and Processes can be related to the final report(s) to bind everything together.
- Optional: Where multiple Data Sets form part of the regulatory submission, the Capability facet can be used to pull all reports together to show the full deliverable.

Such reporting can generate large volumes of assets to construct. As ever, when you try this for the first time:

- Start Small: Start with smaller, simpler reports.
- Iterate and Learn: See what works/doesn’t and work around issue.
- Then Scale: use the learnings to assess how integrations with e.g. EDC and IDQ can be used to make this easier to capture and manage.
### Regulatory Reporting - Facet Summary

<table>
<thead>
<tr>
<th>Typically Used</th>
<th>Lineage (System/ Data Set/ Attribute/ Interface) &lt;br&gt; Glossary &lt;br&gt; Policy &lt;br&gt; Process &lt;br&gt; Data Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended</td>
<td>Regulation, Regulator, Geography</td>
</tr>
<tr>
<td>Optional</td>
<td>Capability</td>
</tr>
</tbody>
</table>

### Key Relationships

<table>
<thead>
<tr>
<th>Typically Used</th>
<th>Attribute x Attribute &lt;br&gt; Attribute x Glossary &lt;br&gt; Attribute x Data Quality Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended</td>
<td>Lineage x Interface: Interface allows you to describe</td>
</tr>
</tbody>
</table>

### Use Case: Data Acquisition

An emerging use case common to many clients is that of Data Acquisition. If you have a commercial agreement with a partner/supplier to receive a regular flow of prescribed data for e.g. analytics to help manage/improve your relationship. Access to the data is heavily controlled by a contract, which limits the use of that data within your organisation.

A suggested approach would be to document in Axon as follows:
- Lineage: Map out entry and consumption points in Systems/Data Sets.
- Policy Facet: describe the internal restrictions created by the contract.
- Process Facet: evidence the use of the data with a map of the processing.

Optional:
- Additional Data: the supplied data is typically fixed by contract. There may be scope within this for occasional requests for extra data. You may need to have an audit trail of how these exceptional requests were handled, any checks and approvals made and obtained, together with a record of what was actually sent to the client.
  - This could be handled by Change Request (CR). Running a CR against an approval workflow can provide the evidence and approvals. If the required workflow is unique to the partner, this could be created against the Data Set, Process or Policy as a Custom workflow (only visible to that object, rather than generally available to all objects in that facet).
- Flagging systems as external - clients frequently ask how to handle declaring systems external to the organisation. Axon already allows you to describe such systems. However, be aware that these systems cannot be governed if they do not fall within your own boundaries.
- It may be better to instead capture the entry point into the organisation, as this is within your sphere of control. Such objects can be governed.

### Data Acquisition - Facet Summary

<table>
<thead>
<tr>
<th>Typically Used</th>
<th>Lineage (System/ Data Set/ Attribute/ Interface)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Glossary</td>
</tr>
<tr>
<td></td>
<td>Policy</td>
</tr>
<tr>
<td></td>
<td>Process</td>
</tr>
<tr>
<td></td>
<td>Data Quality</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Legal Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional</td>
<td></td>
</tr>
</tbody>
</table>

### Glossary of Terms Used

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions Button</td>
<td>When a user visits any object in Axon, there is a blue button in the top right hand of the screen. This is the Actions button, although it may be labelled <em>Actions</em> or <em>Edit</em> depending on the individual users permissions for that object.</td>
</tr>
<tr>
<td>Artefact</td>
<td>Any single object you choose to record as an object in any Axon facet</td>
</tr>
<tr>
<td>Asset</td>
<td>Any single object you choose to record as an object in any Axon facet</td>
</tr>
<tr>
<td>Attribute</td>
<td>Attribute is a term that has wide and varied meaning in the business world. In this document and in Axon we use Attribute to describe a data point found in a database/table/report, it’s the column/field name. Axon attributes must reside within a data set, which in turn resides in a named system.</td>
</tr>
<tr>
<td>Data Dictionary</td>
<td>Again, a term that has wide and varied use in the business world. Some clients use this for: 1. Describing commonly used data points found in tables. In Axon, that would be <em>Attributes</em> in a <em>Data Set</em>. 2. Some form of list/taxonomy of approved definitions or business term. In Axon that would be the <em>Glossary</em></td>
</tr>
<tr>
<td>Conceptual Data Model</td>
<td>See data models</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Logical Data Model</td>
<td>See data models</td>
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<tr>
<td>Physical Data Model</td>
<td>See data models</td>
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<tr>
<td>Data Models</td>
<td>Axon is model agnostic. However many important community</td>
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<tr>
<td></td>
<td>contributors will understand aspects of the organisation</td>
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<td></td>
<td>through the lens of some form of modelling construct, at</td>
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<td></td>
<td>different levels of detail:</td>
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<td></td>
<td>High Level: Conceptual models are the highest level and are</td>
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<td></td>
<td>generally not detailed.</td>
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<td></td>
<td>Medium: Logical Models do begin to start showing lower</td>
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<td>levels of detail.</td>
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<td>Low Level: Physical models are highly detailed</td>
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<td>representations.</td>
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<tr>
<td>Facet</td>
<td>Axon feature. A facet is a specific list of assets that a</td>
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<tr>
<td></td>
<td>client chooses to record in Axon. Facets split these into</td>
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<td></td>
<td>different types of asset, e.g. Process, System, Policy</td>
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<tr>
<td>Unison / Unison Search</td>
<td>The main Axon user interface, which shows your assets</td>
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<tr>
<td></td>
<td>divided into Facets e.g. System, Glossary, Process etc.</td>
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<td>The key aspect of this is the ability to search objects</td>
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<td>and isolate objects in other facets that they are related</td>
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<td>to.</td>
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