informer

Business Intelligence & Data Analytics Platform

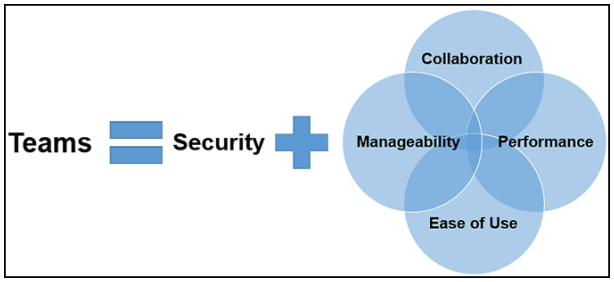
Data Governance and Security

Data governance and security lie at the heart of Informer 5 by incorporating organizational governance policies at the data level, content level, and functional level security. Informer strikes a balance between enabling self-service analysis and protecting your organization's sensitive business intelligence information. And, it provides transparency and traceability of data, while maintaining data integrity and data quality.

With data governance and security functionality designed into the system from inception, Informer answers questions like:

- 'How can I trust the data?'
- 'How can I ensure that only authorized persons can see the data, or parts of it?'
- 'How can I have traceability of key business decisions?'
- 'How do I keep my data from getting unwieldy and uncontrollable?'

Informer 5 utilizes a Teams security model to specifically support real world business operations and security needs. A Team within Informer is defined as a group of Users that comprise a logical business unit within an organization. The Roles within a Team are determined by one's business role. Your organization's logical groups and security rights for your employees map easily into Informer's Teams and Roles.



Teams provide identity access management via an intuitive model whereby you can secure your data and access to it. You can easily determine why a specific User or Team has the rights to perform a specific action or access specific content. As a result, it is easy to audit usage of the system and content and provide users with a single source of truth for content.

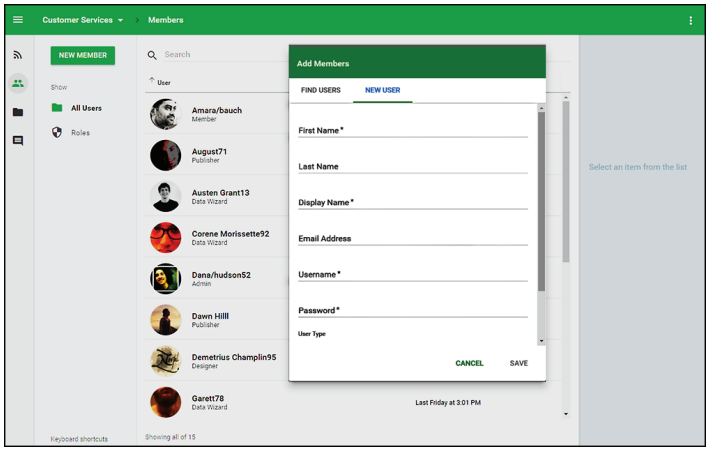
The Teams model ensures that:

- access to sensitive data is secured
- the data used for reporting has not been doctored
- shared data is current and accurate
- users interact with and access the data based on determined security settings
- only those with determined access rights can alter the query behind the data.

Privilege Access Management With Users

Users are assigned certain access rights within Informer based on their role within your organization and business intelligence needs determined by their system administrators. In addition to the typical username, password, and email, a user must be defined as either a Normal User or a Super User. See Figure 1.

Figure 1: Add Member to a Team



- **Normal Users** have no special privileges outside of Team-based Roles and Security.
- **Super Users** have full access rights to the entire system, superseding any Team-based Role assignment. A Super User can view all content within the system, including all fields within a given Datasource, and can modify any Datasource, Dataset, Report, or Job. Only a Super User can define another User as a Super User.

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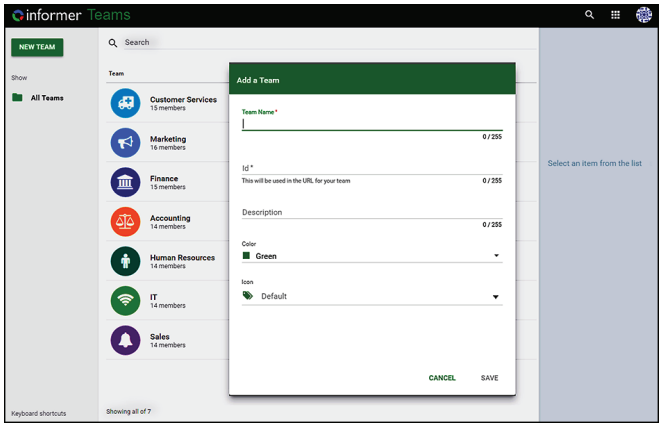
Identity Access Management With Teams

While Users are the individuals with access to Informer, typical business intelligence activities within an organization are completed by groups of individuals comprising a department or logical business unit within a department. See Figure 2.

Figure 2: Add a Team



By nature, different groups have different access rights to business data. And, since members of a group have different functional roles, their access rights within the group differ as well. For example, some members of a department create data content for an organization, while others simply use the data to build business insights.

Every Team has a Team Landing Page for identity access management. From the Team Page, you can view and manage the list of all Users and their Roles, the list of Datasets, Reports, and Datasources owned by the Team, and the list of Datasets, Reports, and Datasources shared to the Team.

Defining an individual's role within the Team is an important aspect of identity access management and adding a Member to a Team. Informer 5 provides comprehensive pre-defined role types for Team members with sensible access rights. See Table 1. These role types map easily to your organization's security permissions for your employees.

As Teams model logical business units within an organization, Users can be Members of more than one Team. Their role within a specific Team is determined by their business role with respect to that Team. For example, the Manager of the Graduate Students Division of the Registrar's office in a University may be the Admin for the Graduate Student Team as well as a Data Wizard for the larger Registrar's Team.

In the scenario where an individual has different roles in different Teams with access to the same content, the highest role permissions will prevail. For example, in the case above, the Manager would have Admin privileges for any content that is available to both the Graduate Student Team and the Registrar's Team.

Table 1: Team Roles

Role Name	Rights
Member	View anything Owned by the Team
Designer	All Member rights Create content from Datasets available to the Team. Upload spreadsheets into new Datasets. Create Reports from Datasources available to the Team
Data Wizard	All Designer rights Create Workspaces Create Datasets from Datasources available to the Team. Edit Team-owned Datasets. Create, Run, and Schedule Jobs
Publisher	All Data Wizard rights Share Team-owned Datasets and Reports to other Teams
Admin	All Publisher rights Manage members Add a Datasource to the Team Share a Team-owned Datasource to other Teams

As with Users, you can also source Teams from a third-party repository using Informer's Plugin Architecture. For example, Teams can be retrieved for use in Informer by referencing Divisions within your organizational chart and applying those Users and Teams to Informer together with the appropriate Roles.

As a User is introduced into Informer, they are assigned to a default Team determined by the Informer system administrators. For example, connect Informer via LDAP and assign to an umbrella Team for the organization named All Employees.

Ownership of Content for Strong Data Governance

Ownership of content (Datasource, Dataset, Report, and Job) is a powerful concept in Informer 5. It implies quality and confidence in the content. All content in the system has a single Owner. Ownership can be by an individual User or a Team, with the typical scenario being a User owning the content while creating and iterating on it, and eventually passing on Ownership to the Team once finalized. When

content is owned by a Team, it represents a credible single source of truth providing for Data Governance.

Ownership is an important part of privilege access management as it implies privileges on the content and determines who can modify an entity. As a result, the content quality is preserved and once shared with others, holds credibility.

If the Owner is a User, then the User is considered an Admin for the content with all functional privileges – create, edit, copy, delete. If the Owner is a Team, then the Role within the Team determines the privileges on the content. See Table 1: Team Roles for role definitions and privileges.

Best Practices Data Governance example for creating and Ownership of a Dataset

Bob is a member of the Human Resources Team with a Data Wizard role. He creates a Company Attrition Rate Dataset by pulling in appropriate data and creating Data Flows. He is the Owner of the Dataset and thus considered the Administrator of the Dataset. This is now his personal workspace to iterate on the creation of the Dataset.

After he is satisfied with the Dataset, he changes Ownership from himself to the Human Resources Team. The Team can then iterate on the Dataset in a collaborative fashion. Once the Dataset is finalized, the Publisher role within the Human Resources Team can then decide to which other Teams the Dataset should be shared. The Dataset now holds credibility as it is owned and shared by the Human Resources Team within the organization. This example of privilege access management applies to all content – Datasets, Reports, and Datasources – and provides Data Governance.

Sharing Content Confidently

Organizations rely on departments to share content between each other reliably and confidently. Sharing content while tracking edits and editors enables Teams to create a library of curated content and provides for Data Governance. With Informer, providing content access to members outside of your Team is tightly controlled and monitored.

In Informer 5, Datasets and Reports are either shared across Teams in full (though read-only), regardless of a User's role within the shared Team, or not shared at all. Users with the appropriate Role within the owning Team have edit capability.

Datasource Sharing

Sharing a Datasource provides Teams with query access to the Datasource as specified on an individual Team basis (Limited Access, Full Access, Custom Access, or No Access). See table 2.

Selecting a level of access for a Shared Team means choosing the access level that a Data Wizard, Publisher, and Administrator on the Shared Team are allowed.

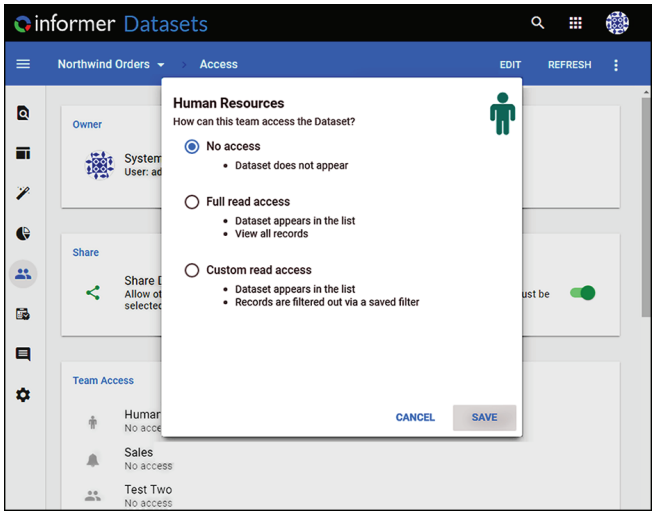
Table 2: Datasource Access Roles

Role Name	Rights
No Access	Default – Datasource does not appear
Limited Access	Only the Query Designer may be used to create Datasets No Restricted Fields
Full Access	Datasource can be queried without any restrictions
Custom Access	Only the Query Designer may be used to create Datasets Selected Mapping Sets only (choose whether to allow Restricted Fields)

Dataset and Report Sharing

Sharing a Dataset provides read-only access to the selected Teams while the Dataset Owner retains editing access to the Dataset. Privilege access management determines when sharing a Dataset, the Sharing Team must select the level of access being given to the selected Team (No Access, Full Access, or Custom Access) See Figure 3. Custom Access gives only a Filtered view of the Dataset to the selected Team as rows are filtered out of the view. This is a way to also achieve row level security.

Figure 3: Sharing a Dataset access tab



Sharing a Dataset does not include sharing associated Reports — those must be shared explicitly. Even though sharing a Report implies access to underlying Datasets for the purposes of the Report, Users can only filter. The underlying Datasets are not available as source for other content and will not display as an available Dataset outside the scope of the shared Report.

Learn more about Informer:

- Data Visualization
- Discover
- Datasets
- Data Filters
- Teams
- Jobs
- Data Flows
- Datasources
- Extensibility

Getting Started

To get started on a free trial, contact sales at informersales@entrinsik.com or call 888-703-0016. Visit www.entrinsik.com/informer for more details.

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