

Data Connections

Melissa Neuendorf
Sr. Product Manager



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Agenda

Wednesday, December 4, 2019

- Understand how organizations are set-up and managed in John Deere Operations Center
- Understand how the organizational set-up impacts the data your software has access to
- Introduce how the changes in OAuth will impact your software

Organizational Setup

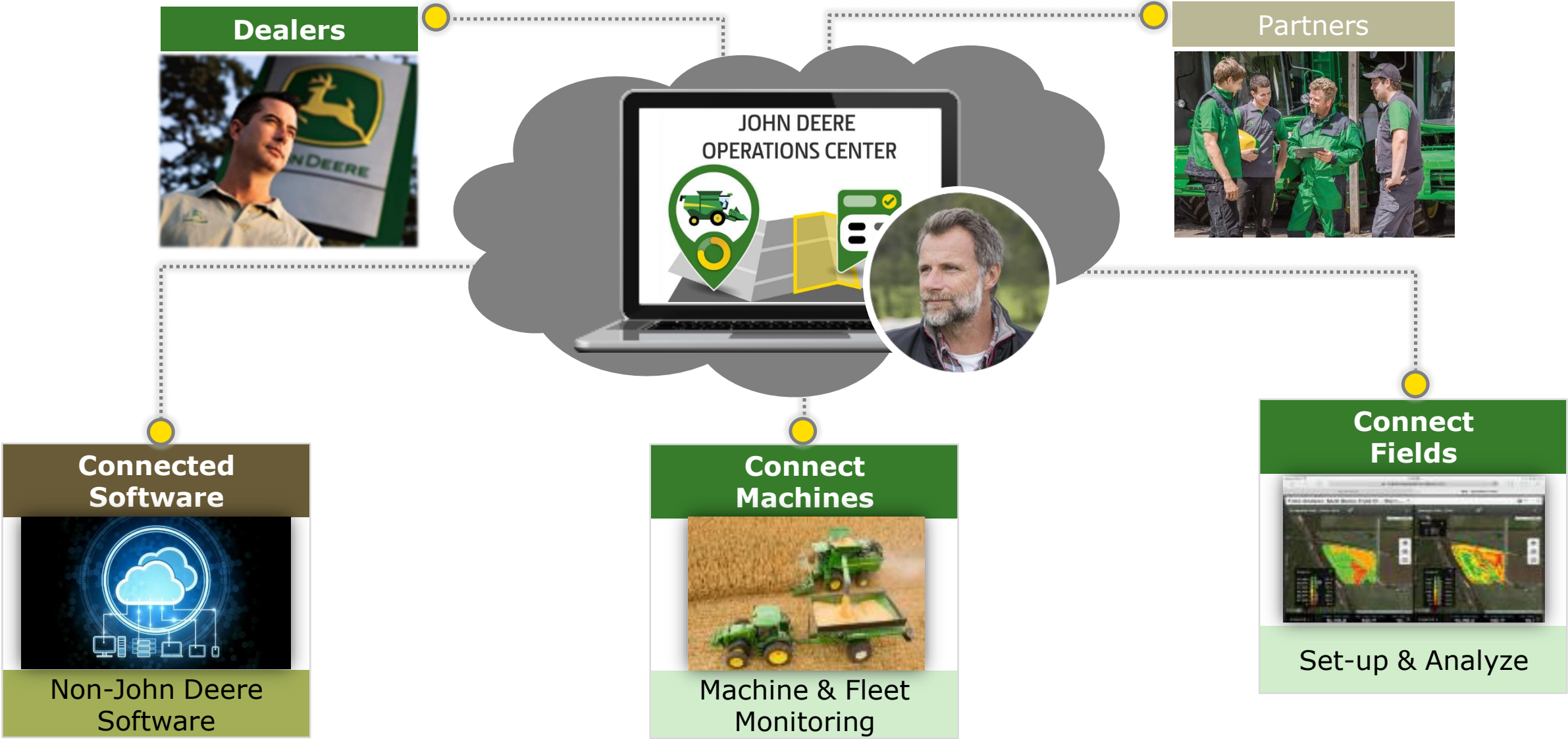
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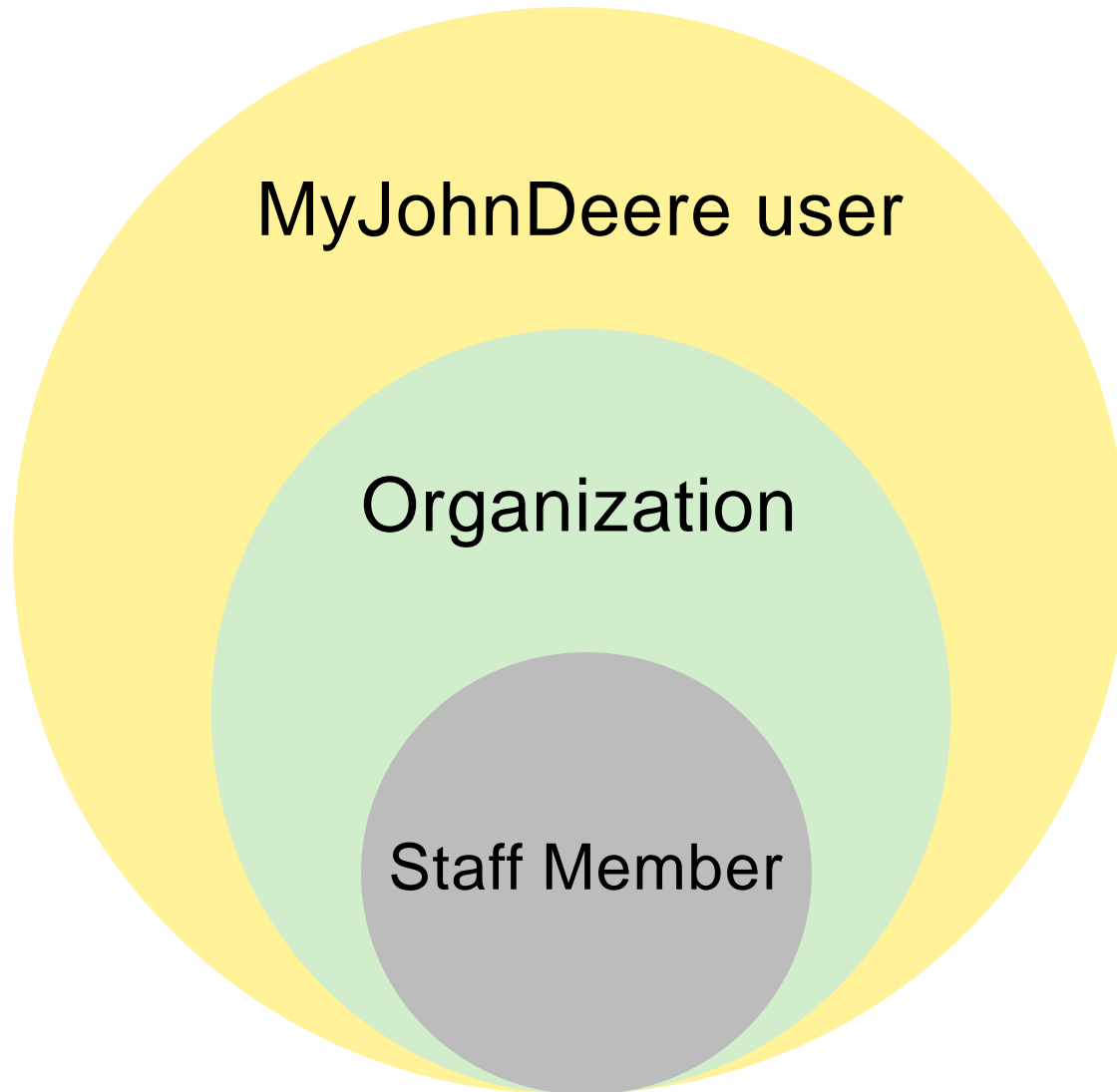
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Connecting customers



MyJohnDeere user and organization concepts



A user creates a MyJohnDeere account to gain access to John Deere software, which creates a MyJohnDeere user.

Users can be added to organizations.
Data is stored at an organization level

Users are staff members in organizations.
Permissions to data are granted at a staff member level.

A MyJohnDeere user can be a staff member of multiple organizations

Neuendorf Org (123)



Conner Org (456)



Within each organization, the staff member can have different access levels

Neuendorf Org (123)

Equipment	Level 2
Org Management	Level 1
Locations	Level 1

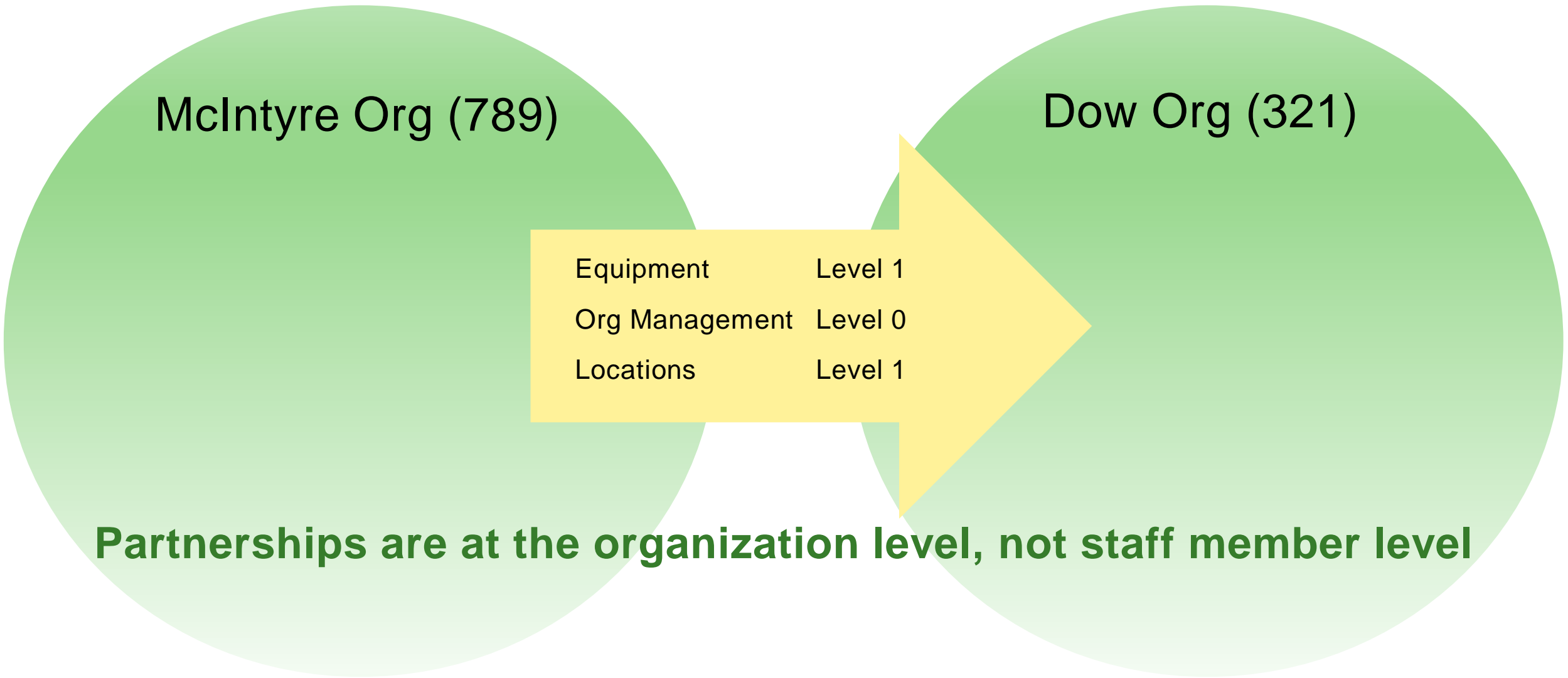


Conner Org (456)

Equipment	Level 1
Org Management	Level 0
Locations	Level 0



An organization can grant another organization access to data via a Partnership



Partnerships are at the organization level, not staff member level

Org Level Permissions

Equipment

EQUIPMENT

Access Level - 3 +

- 1 View Equipment**
Ability to view equipment details, including location, driving directions, alerts, offsets, maintenance plans and landmarks.
- 2 Edit Equipment**
Ability to add equipment, edit equipment name, offsets, terminal settings, geofences and curfews, and maintenance plans.
- 3 Manage Equipment**
Ability to delete equipment, transfer terminals, and assign terminals to machines.

Also grant...

- ☒ **Remote Display Access**
Ability to remotely view compatible John Deere displays.

Organization Management

ORGANIZATION MANAGEMENT

- 1 View Staff, Operators, and Partners**
Ability to view organization staff, operators, and partners, including...
- 2 Manage Staff, Operators, and Partners**
Ability to add, edit, and delete staff, operators, and partners.

Locations and Jobs

All Fields ▼

LOCATIONS (ALL FIELDS)

Access Level - 1 +

- 1 View Locations**
Ability to view products and locations including driving directions, boundaries, and tracks.
- 2 Analyze Production Data**
Ability to view Field Analyzer and Agronomic Reports.
- 3 Manage Locations and Production Data**
Ability to edit and delete locations, products, and production data.

JOBS (ALL FIELDS)

Access Level - 0 +

- 1 View and Operate Jobs**
Ability to view jobs, products, and tank mixes, edit status, notes, and results.
- 2 Create Jobs and View Results**
Ability to create jobs, products, and tank mixes and view results.

Data Flow



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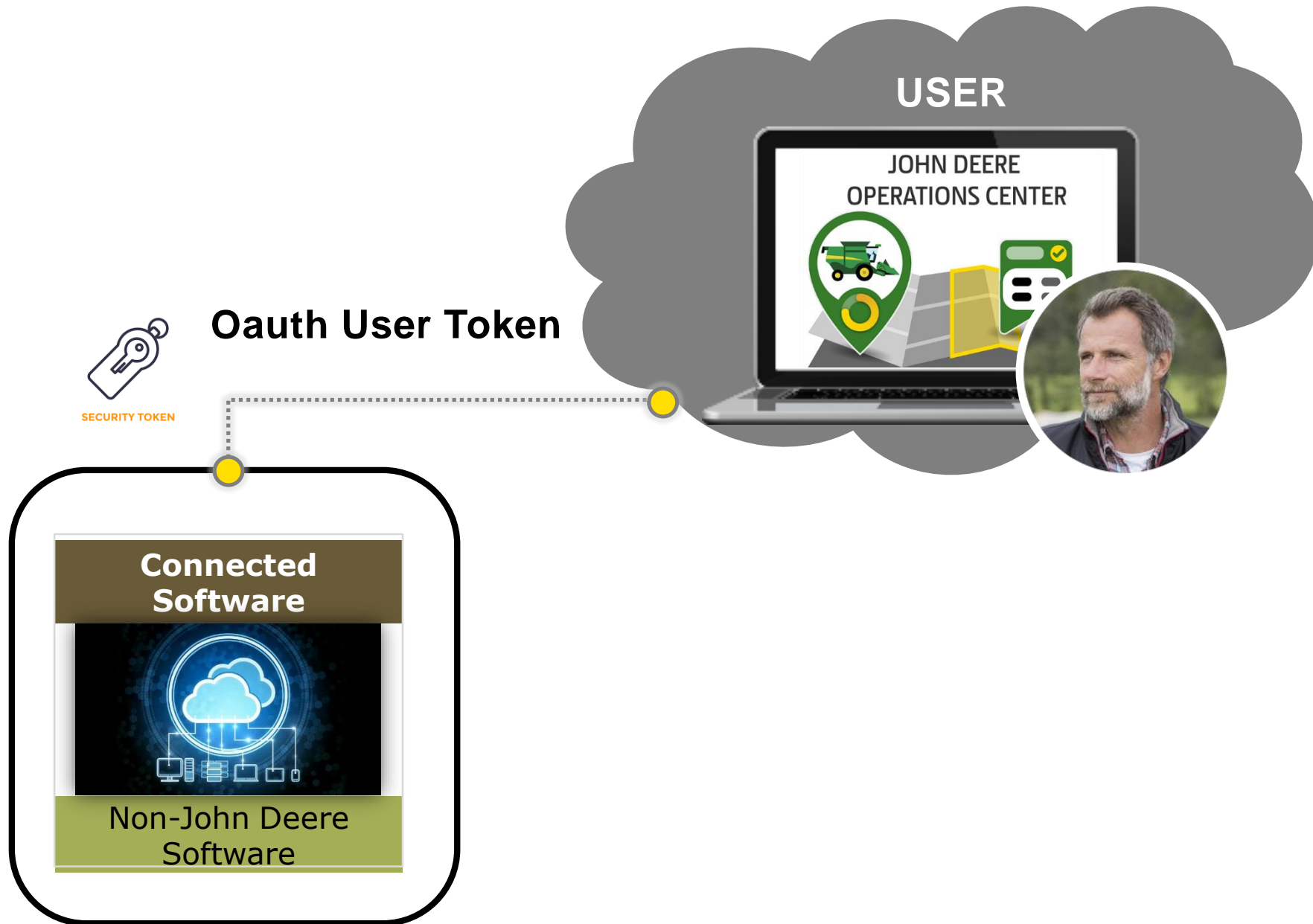
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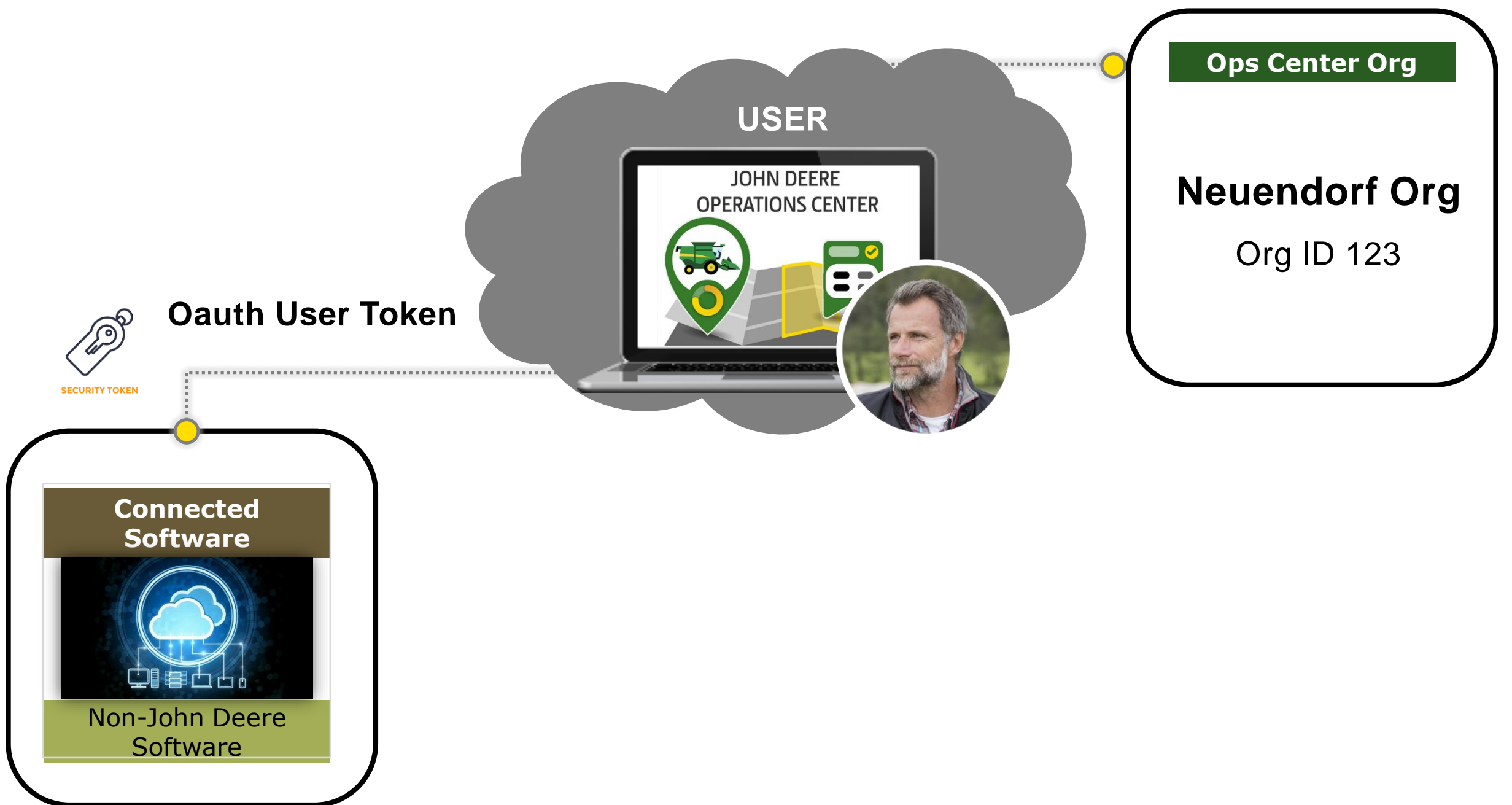


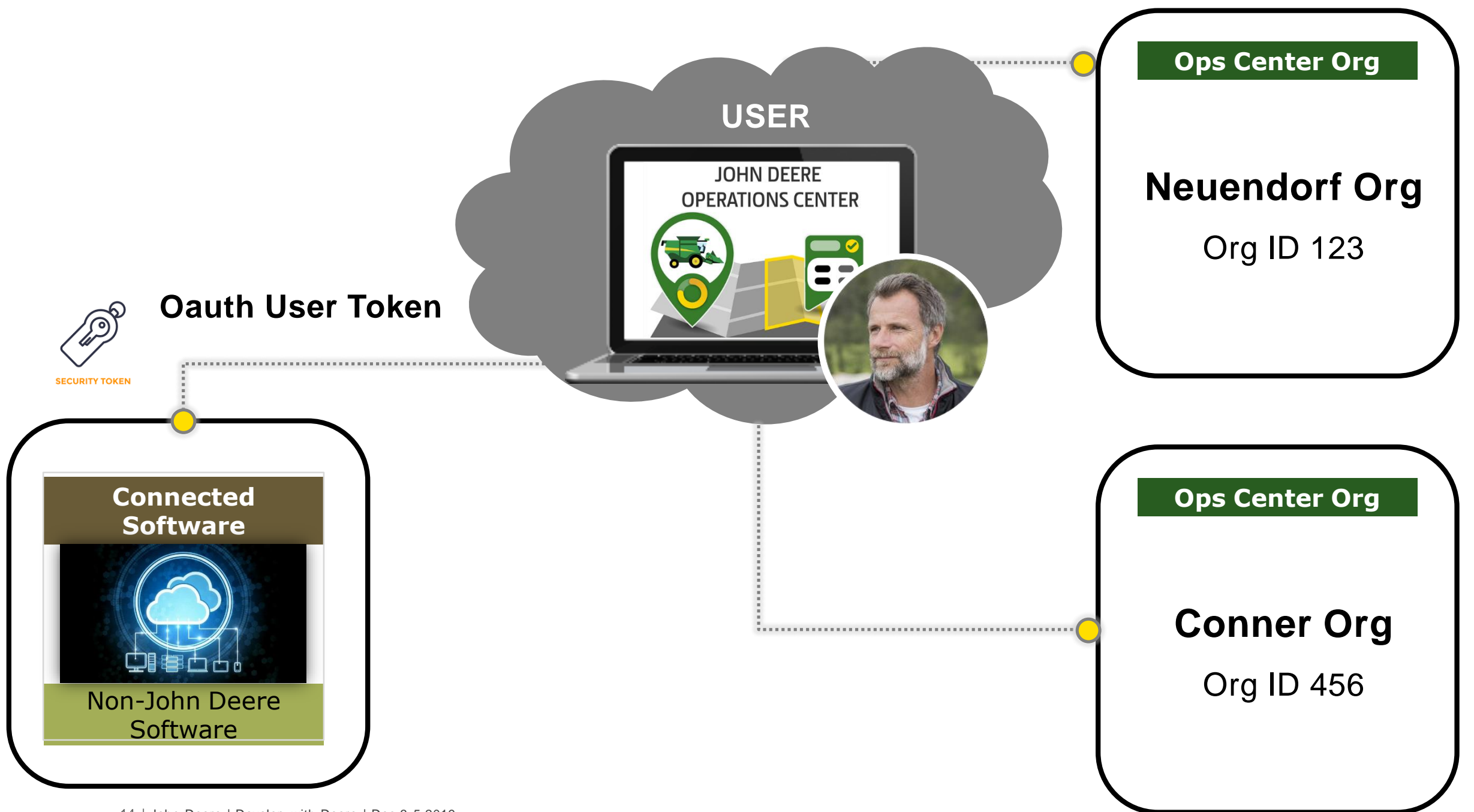
SECURITY TOKEN

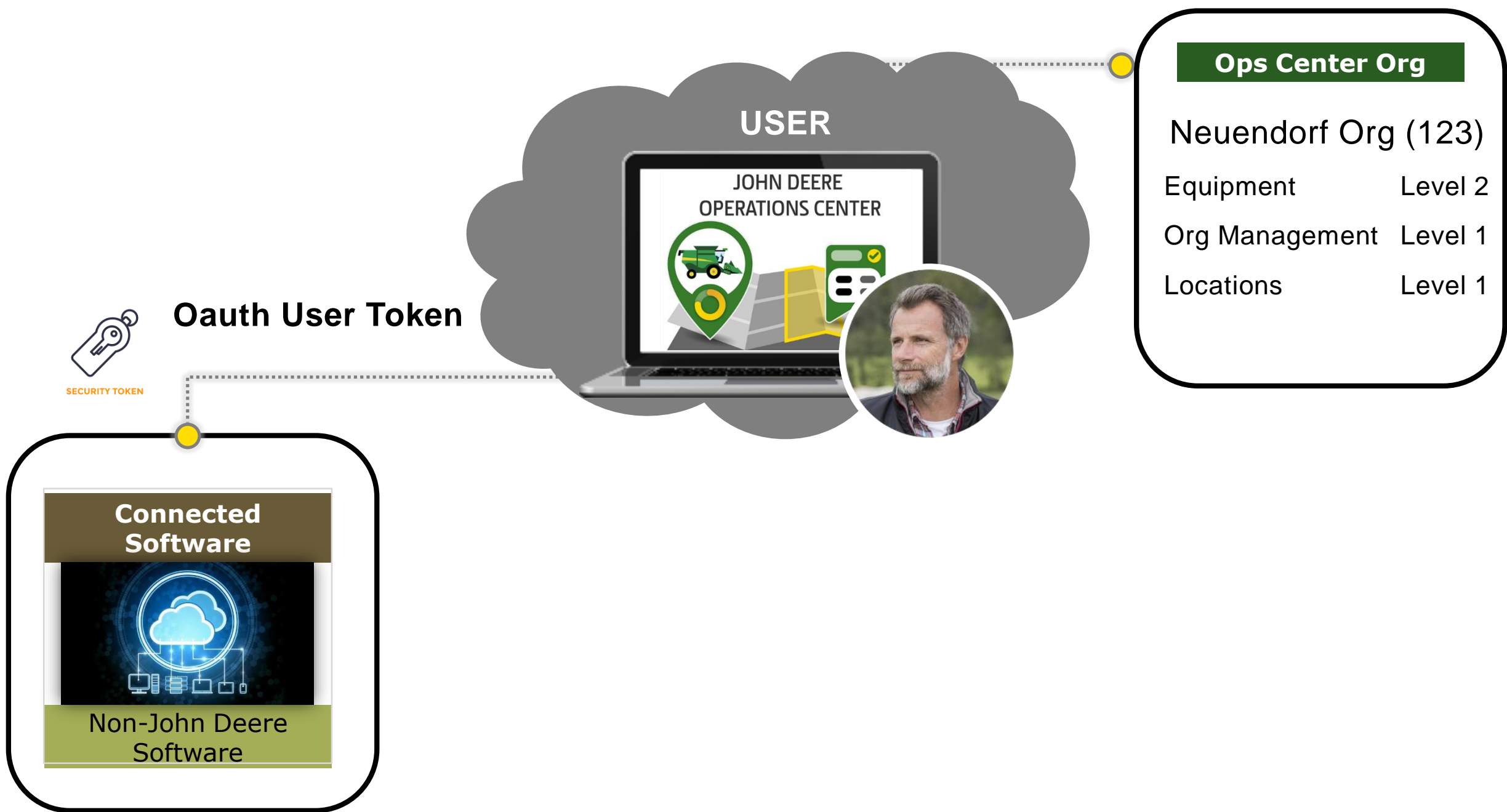
Oauth User Token

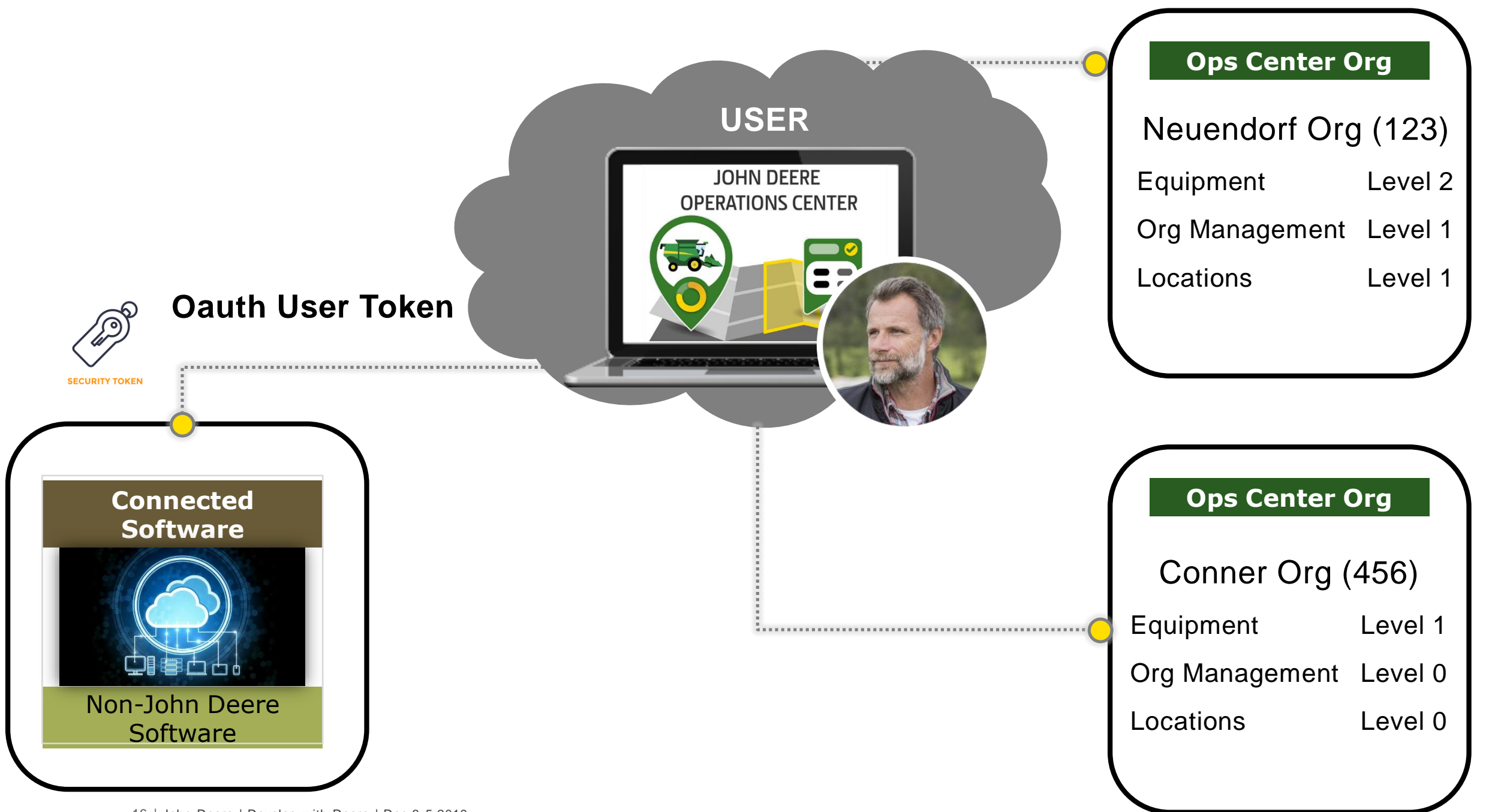
The security token grants the software access to data on User's behalf











What this means for you?

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Retrieve a list of fields

GET

/organizations

/{orgID}

/fields

View Fields in an Org

View a list of fields within a specified organization. For each field, the response will contain links to the following resources:

- **boundaries:** View the boundaries of this field.
- **clients:** View the clients belonging to this field.
- **farms:** View the farms within this field.
- **owningOrganization:** View details on the organization
- **activeBoundary:** View the details of the active boundary

Parameters

Parameter	Type	Example	Description	In	Required?
orgID	string	1234	Organization.	path	Yes
fieldName	string	Field007	Filter by field name.	query	No
farmName	string	Smith Farms	Filter by farm name.	query	No
clientName	string	John Smith	Filter by client name.	query	No
status	string	ARCHIVED/AVAILABLE/ALL	ARCHIVED will return the archived fields in the organization. AVAILABLE will return the unarchived fields in the organization. ALL will return fields that are available in the organization.	query	No
embed	string	clients, farms, boundaries	Include into the field response the requested objects. Possible values include clients, farms, boundaries, simplifiedBoundaries and activeBoundary.	query	No
x-deere-signature	GUID	9r839261-5e4b-4e1c-9201-8026f47109bb	x-deere-signature should be managed by the client per user per API. For a new user/new API, the first request will have a blank value for x-deere-signature. Changes can be tracked with the x-deere-signature returned in the response. If the response has not changed since the last API call, the value of x-deere-signature is not changed and the client should use the same GUID next time.	header	No

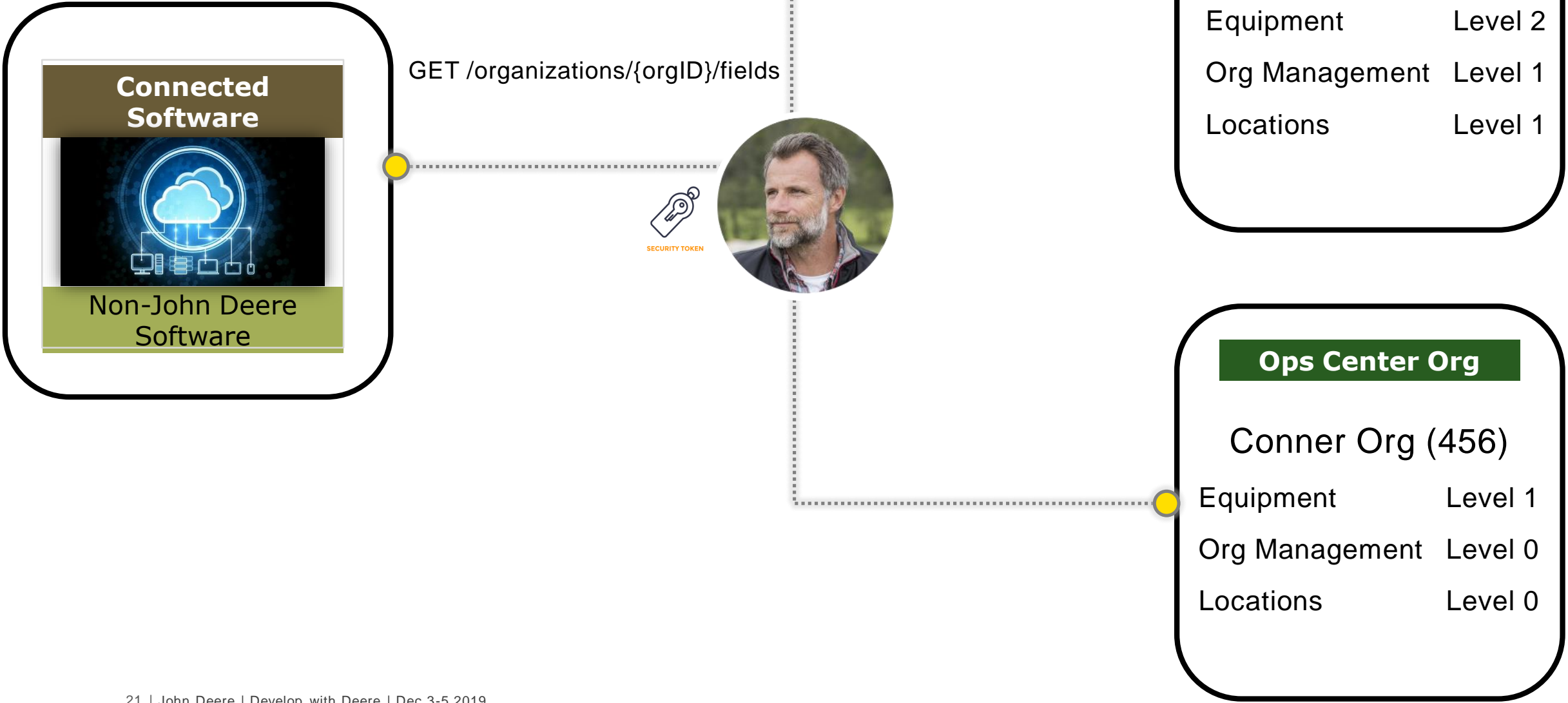
Retrieve a list of fields



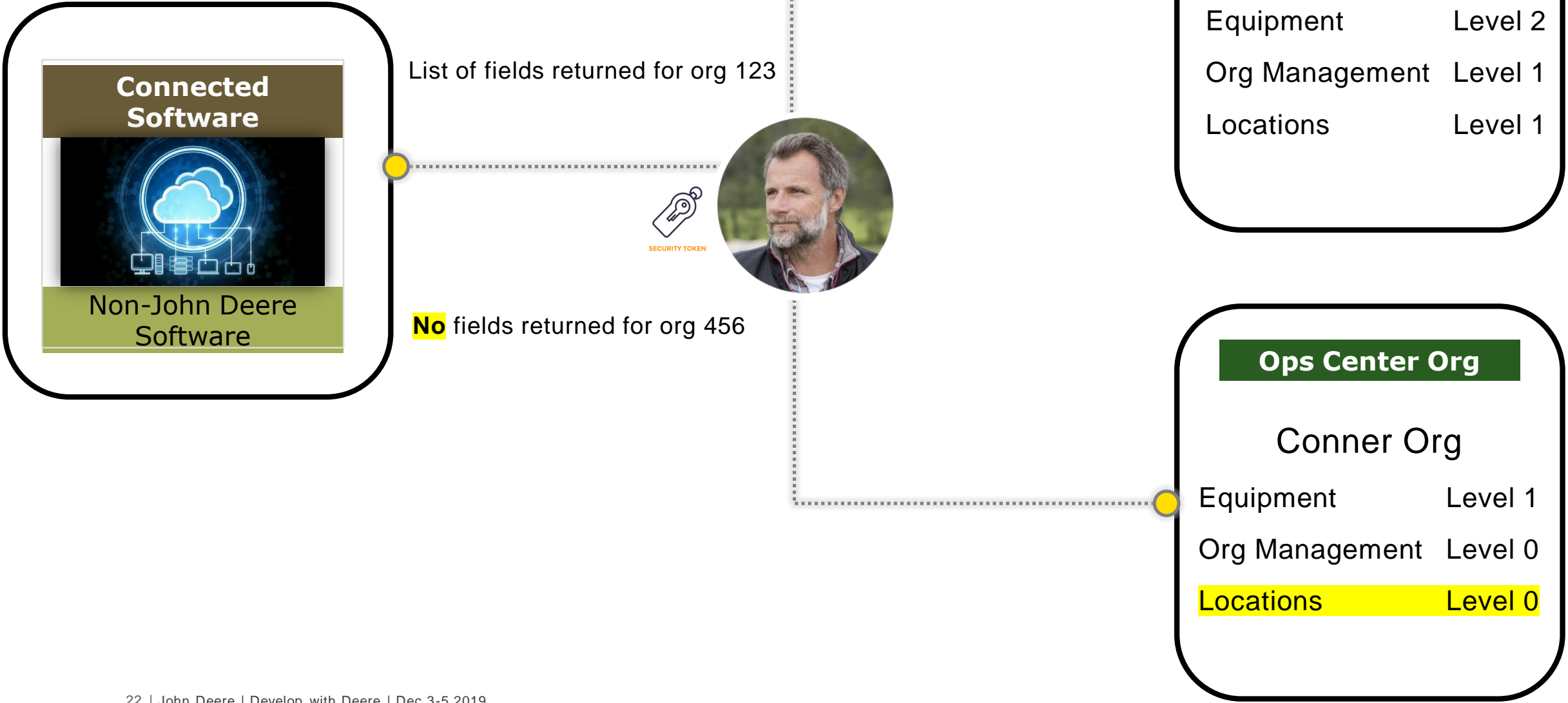
Retrieve a list of fields



Retrieve a list of fields



Retrieve a list of fields



We are changing from Oauth 1.0
to Oauth 2.0 to improve

ease of use

for you and our mutual customer.



Summary



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Data Connections Summary

- Customers have complex networks to manage. John Deere's platform helps to make those connections easy.
- As a Connected Software Company you do not need to form a partnership with the user. The user will authorize your software to access his data on his behalf.
- Understanding the data your user has access to will help you understand the data that is returned to your software.



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