

### **TIPS OG TRIKS**

Teams Meeting 6 November 2023

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### Dagens ämnen

Introduktion

Det bästa från M3 Connect – "Mission impossible"

Huvudpresentation observationer

Arkitektur framtid

M3 Administration

Användarupplevelse

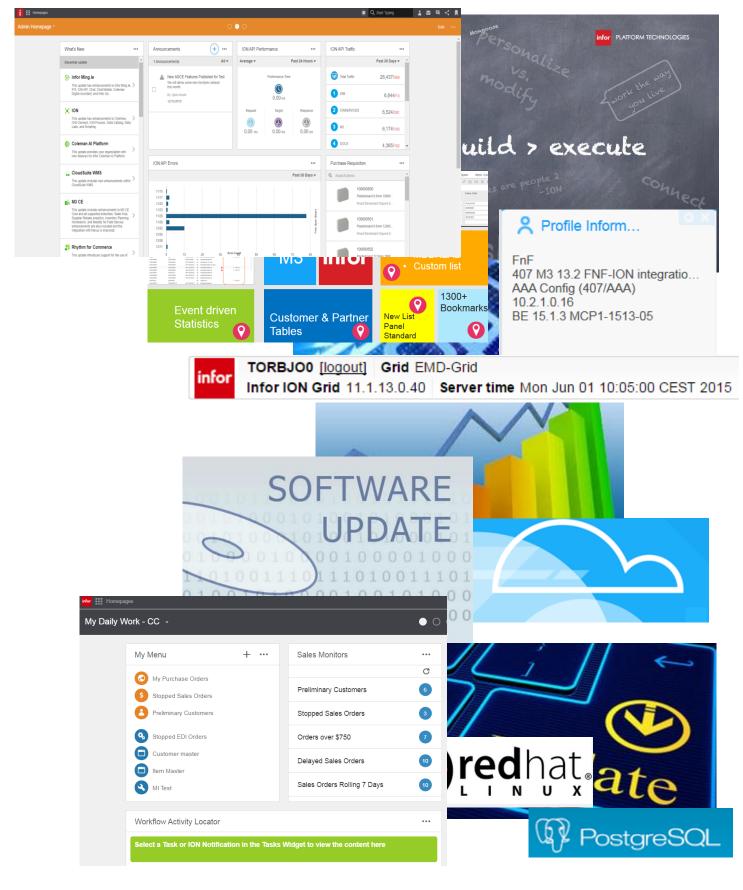
Integrationer

**Dokument** 

Verktyg för kundunika och molnsäkrade anpassningar

**Bonusmaterial** 

Avslutning med frågor och information om nästa Tips&Tricks

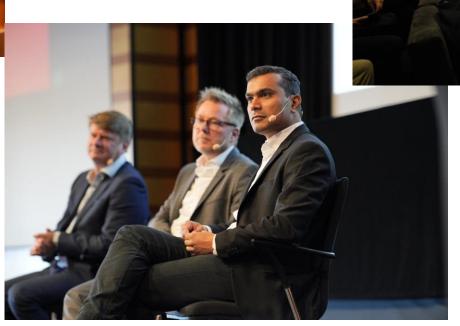


M3 connect

Some photos











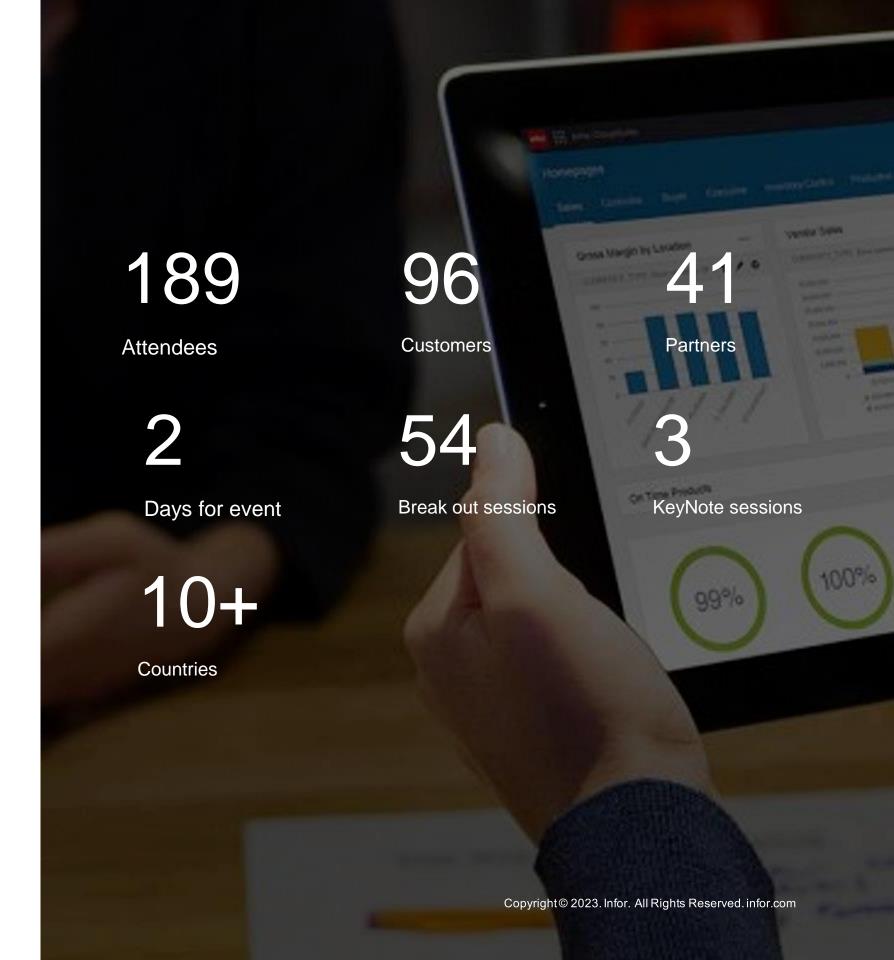
M3 Connect

### Some stats

First event like this since 2019

Replaces TechEd but will be more M3focused and less general technology

Multiple companies sent 5 or more attendees!



	Auditorium	Atlas	Hades	Chronos	Chaos	
	Overview Track	Industry Applications	User Experience	Technology	Integrations and Analytics	
9:00am - 09:50am	Keynote					
	Torbjörn Karlsson, Ole Rasmussen					
	Coffee break					
10:10am - 11:00am	Application foundation highlights	Supply chain planning	M3 UI Technology	Infor Cloud architecture overview	Integration overview – news and plans	
	Jorgen Karlsson	Fredrik Zachrisson	Rickard Eklind	Erfan Yousefi	Henrik Johansson & Nichlas Karlsson	
11:10am - 12:00am	Sales price management	Central procurement	Output management what you need to know to get the best output management	Administrative tools for M3 Business Engine	M3 Analytics – Now and beyond	
	Jorgen Nilsson & Anna Elfstadius	Per Madsen & Sanna Norling	solution Martin Jarrolf	Håkan Lundh & Filip Håkansson	Pierre Nolte & Per Melander	
12:00pm - 1:00pm	Lunch					
1:00pm - 1:50pm	M3 Highlights					
2:00pm - 2:50pm	M3 Experience designer	M3 Financial Accounting	M3 Portal and M3 CLM	Customizing business logic	Infor OS integrations and M3	
	Gunilla Andersson & Erik Backlund	Per Jodrén & Jacob Brandon	Thomas Herres & Johan Ahlgren	using XtendM3 Erfan Yousefi, Magnus Tallqvist, Filip Håkansson	Anders Karlsson & Vignesh Subramanian	
	Coffee break					
3:10pm - 4:00pm	Internal Sales order & PO Batch order entry	M3 Equipment, parts distribution, service and rental	Infor OS Portal – how to run M3 in a smart way using Infor OS	Cloud File Transfer and introducing CFT Cloud storage	M3 and Data Fabric – Overview	
	Per Madsen & Sanna Norling	Dan Georgsson & Anders Nilsson	Portal Gunilla Andersson	Håkan Lundh & Fredrik Selleby	Per Melander & Pierre Nolte	
4:10pm - 5:00pm	M3 API Best practices	M3 Service and MFS, functional highlights	Oldies but goldies	Configuration Management (ACM)	M3 Analytics – Now and beyond	
	Erfan Yousefi & Anders Karlsson	Viktoria Wilborg Falkedal, Malcus Lindberg and Håkan Lindblom	Gunilla Andersson & Magnus Tallqvist	Rickard Eklind	Pierre Nolte & Per Melander	

			Hades	Chronos	Chaos	
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	Per Madsen	Jörgen Nilsson	Martin Jarrolf	Håkan Lundh & Fredrik Selleby	Nichlas Karlsson	
12:00pm - 1:00pm	Lunch					
1:00pm - 1:50pm	M3 Microservices	M3 Financial Accounting	M3 Experience designer	M3 Equipment, parts distribution, service and rental	Integration best practices	
	Fredrik Zachrisson	Per Jodrén	Gunilla Andersson & Erik Backlund	Dan Georgsson	Erik Stanzé & Christian Flodin	
	Configuration Management (ACM)	Internal Sales order & PO Batch order Entry	Infor OS Portal – how to run M3 in a smart way using Infor OS Portal	Customizing business logic using XtendM3 Erfan Yousefi, Magnus Tallqvist, Filip	Infor OS integrations and M3	
	Rickard Eklind	Per Madsen	Gunilla Andersson	Håkansson	Anders Karlsson & Vignesh Subramanian	
	Coffee break					
3:10pm - 4:00pm	Manufacturing Execution- and Product Data Management area	M3 Service and MFS, functional highlights	Oldies but goldies	Administrative tools for M3 Business Engine	M3 and Data Fabric – Overview	
	Erika Tell and Stefan Frandén	Viktoria Wilborg Falkedal, Malcus Lindberg and Håkan Lindblom	Gunilla Andersson & Magnus Tallqvist	Håkan Lundh & Filip Håkansson	Per Melander	
4:10pm - 5:00pm		Best practices Warehouse Management Henrik Göransson	M3 Experience Designer – Build you own application, for beginners Disa Gillner & Erik Backlund	M3 API Best practices  Erfan Yousefi & Anders Karlsson	Integration best practices  Erik Stanzé & Christian Flodin	

M3 Connect

# Beyond applications Dilemma for CIOs

### Key challenges

Complexity and cost with multiple vendors

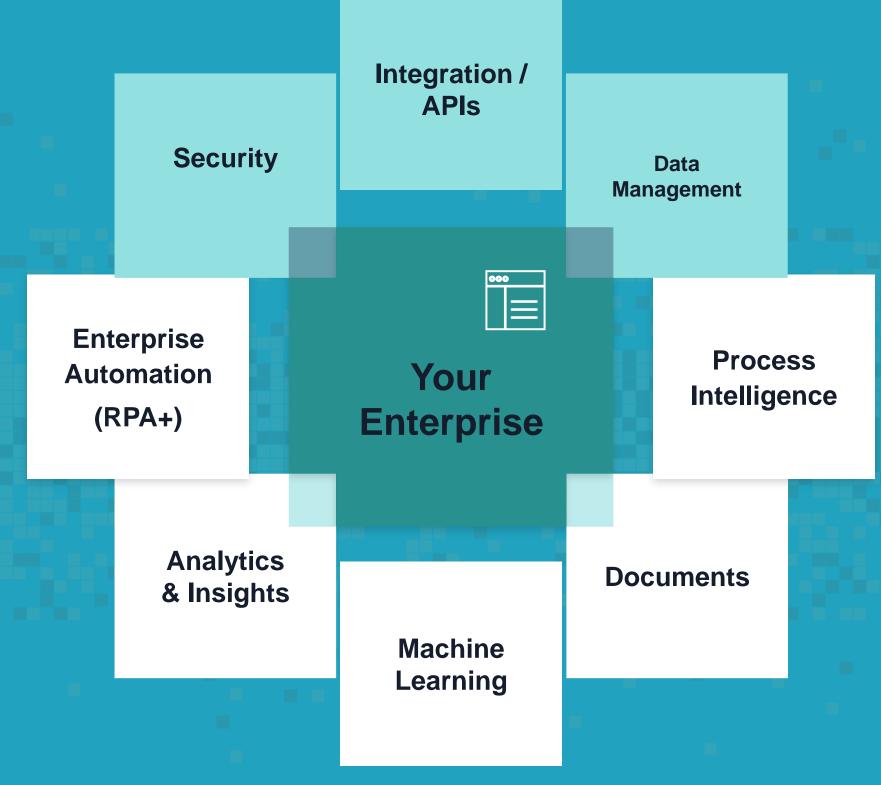
Need to maintain different skillsets

"Forever" integration & maintenance work

Dealing with multiple clouds

Security challenges

Fragmented user experience



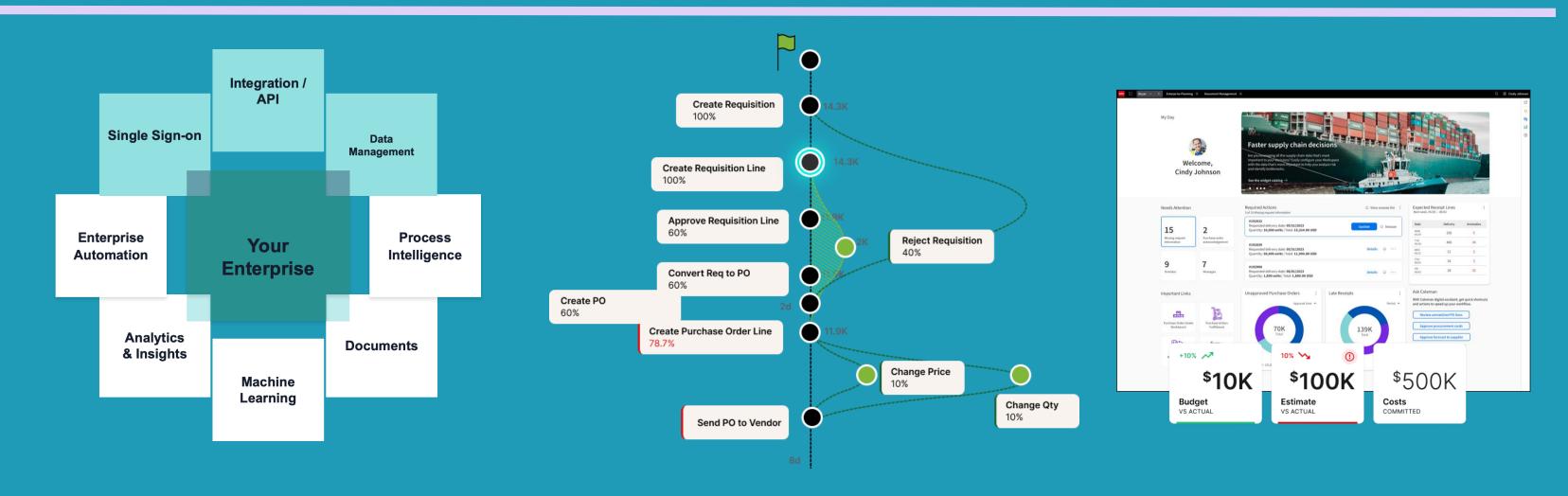
Organizations are often forced to "stitch together" multiple applications, resulting in a fragmented and fragile enterprise architecture

### Infor solution

One Integrated Platform

Composable Processes

Automation / Intelligence / Productive



### **UX Direction**

**Portal** 

Portal for the cloud suite

Workspace

Persona driven workspaces

**Experience Designer** 

Persona driven applications

**API Layer** 

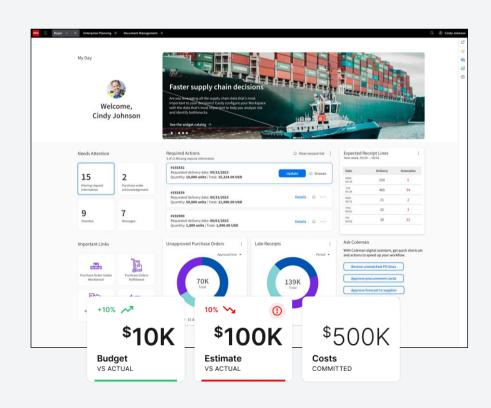
**M3 Micro Services** 

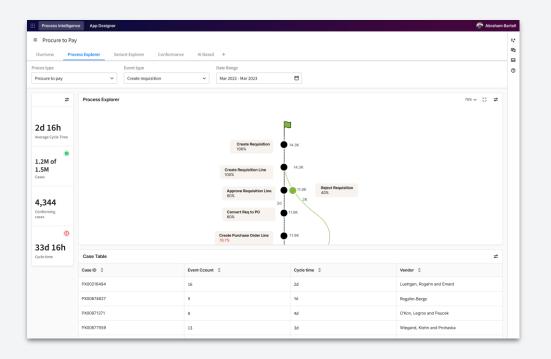
**Custom Application Logic** 

### Infor OS Portal

## Persona driven workspaces

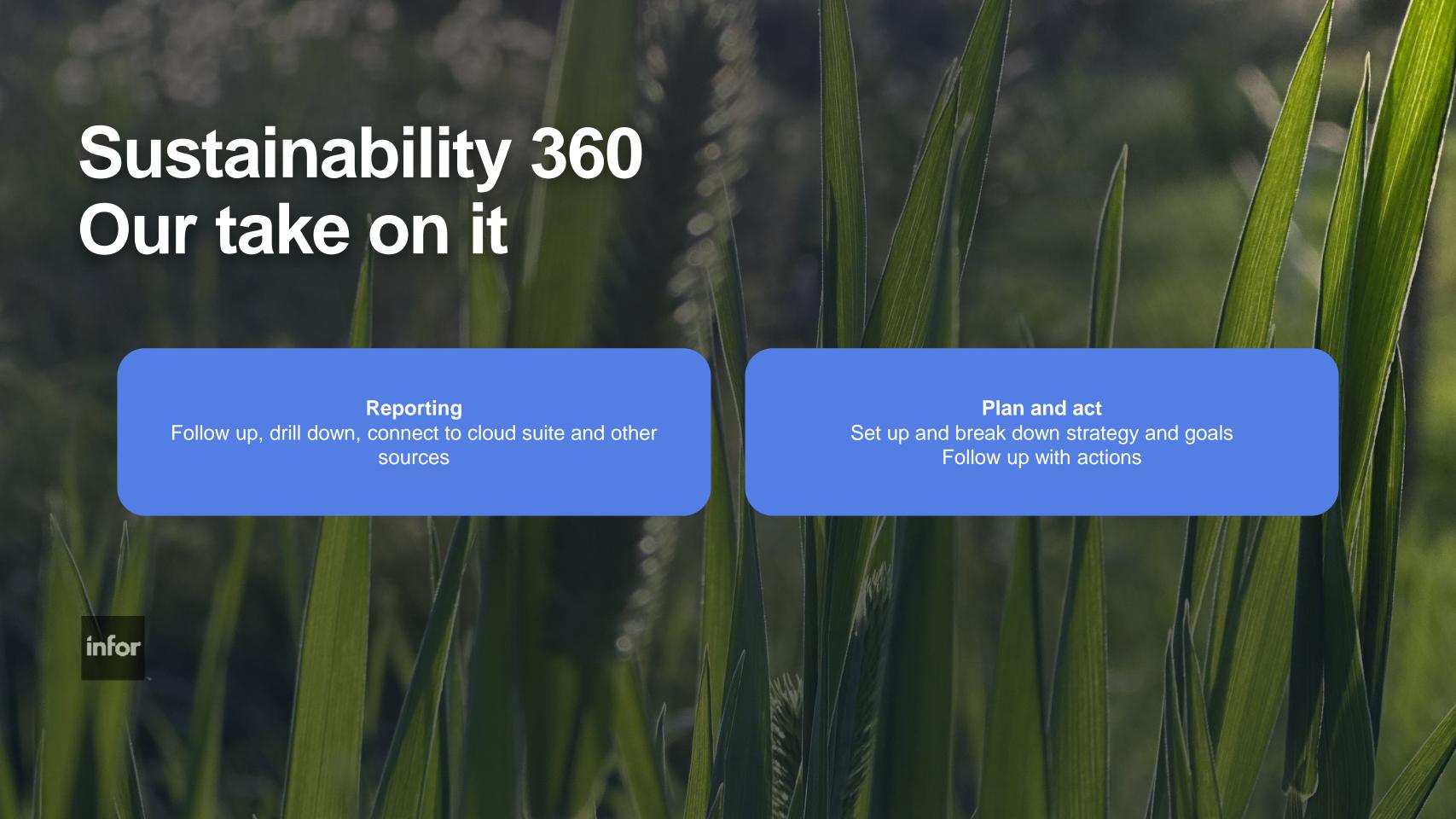
# A portal solution that offers a coherent user experience for Infor Applications





- Application navigator
- Tabs of open apps
- Insights with Workspaces
- Pop-out Smart Panel
- Easy to use, secure, efficient, extensible, and productive





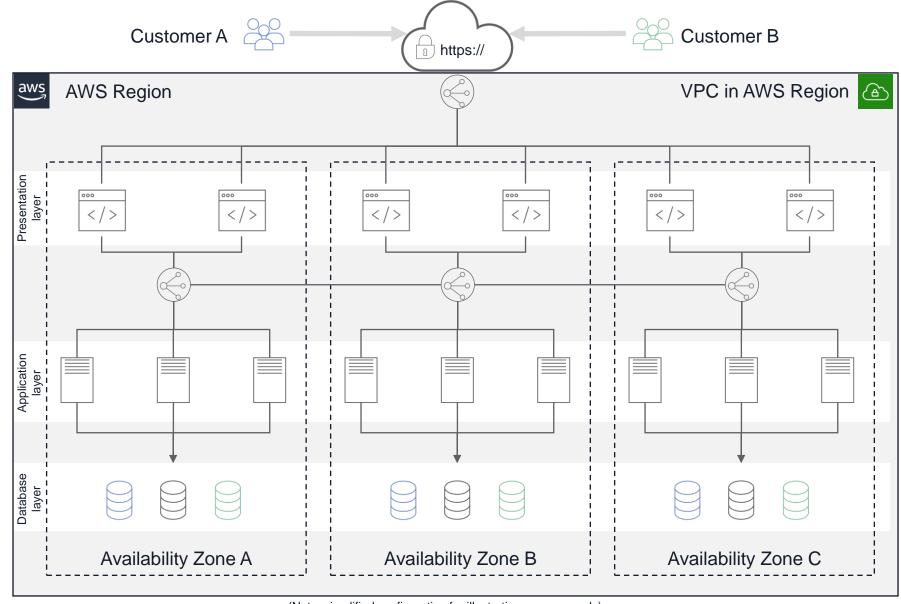
### **Infor M3 Connect**

### 54 sessions in a few minutes

Or "Mission impossible 8 – Information overload"



### CloudSuite architecture – High availability



Minimum of 3 AWS Availability Zones in use

Multiple Auto-Scaling Groups for each workload type

Auto-scaling replaces failed servers + can add capacity

Database servers in multiple clusters

- Use real time replication (SQL Server Always On Availability Groups)
- Automated fail-over

(Note: simplified configuration for illustrative purposes only)

### **Secure Development & Operation**

#### Design

01

- Peer-reviewed architecture & design
- ISO / AWS as partner
- Well-architected and secure tools
- Enforced architecture policies

02

#### **Implementation**

- Static Application **Security Testing**
- Software Composition Analysis
- Open-Source Compliance
- Software Bill of Material

03

#### **Testing**

- Dynamic Application **Security Testing**
- Container Security Analysis
- Penetration Testing
- Release Audits & Certifications

04

#### **Deployment**

- System Hardening
- Host Vulnerability Scanning
- Data Encryption
- Network Security & Layered Defense
- Vendor Risk Assessment

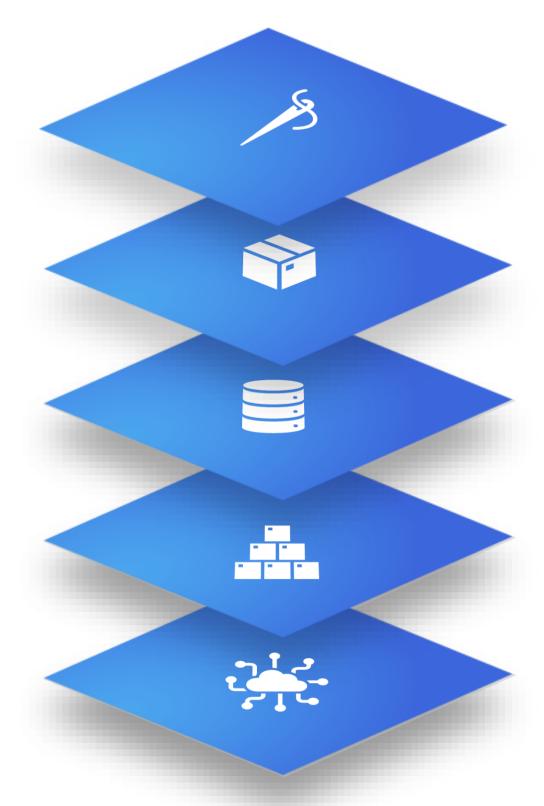


#### **Physical Security**

- Biometric-protected
- · Physical intrusion monitoring, detection, and alerting

### **Innovation Continues**

- Modern Extensibility Layer
  - Upgraded customization platform
- **Modern Runtime Layer** 
  - Upgraded runtime
- **Modern Storage Layer** 
  - Upgraded storage
- **Modern Infrastructure Layer** 
  - Upgraded infrastructure
- **Modern Automation Layer** 
  - Upgraded automation





- Loosely coupled services
- Each team owns its own service
- More frequent and smaller updates

M3 Microservices

# Microservice advantages

What is in it for us?



Performance & Scaling

- Cloud Native
- Optimization of database access
- Each service built for purpose
- Deploy more instances Infinite scaling



Don't re-invent the wheel

- Well known technologies
- Use OpenSource, do not write your own solutions
- Leverages huge investments in Cloud made by AWS
- Smarter solution from experience

### What is an M3 Microservice

A standalone web application/service, loosely coupled and independently deployed as container

M3 Microservices run on a new runtime platform, with separate infrastructure and delivery pipeline parallel solution with completely different tech stack

Each microservice provides and owns a business functionality, other services will use it for interacting with that function or its data

Called through **REST endpoints** or listening to asynchronous events

### M3 Business Engine Administration Tools

- The Administration Tools can be accessed via the Infor M3 menu in Infor Portal
- The Administration Tools has a submenu and the entries shown in the submenu are controlled by IFS roles
- Information on BE Admin Tools can be found in "M3 CE Core Administration Guide" docs.infor.com

#### Required Security roles for M3 CE Core

If any of the required Security roles are missing, you must add these roles manually through the User Management menu in Infor Ming let or Security menu in Infor OS Portal. To add new roles, you must be connected

See information about adding a security role in the Infor Ming le Online Help or Infor OS Portal User Guide

#### Required Security roles

This table shows the list of Security roles that are required to accomplish administration tasks for each M3 application type:

Application type	Security role	Description
Grid	GRID-Administrator	Users with this role can download the CFT Client installation.
M3 Business Engine	M3BE-FndAdmin	Users with this role can list, stop, configure logging and log levels, and configure profiling for all M3 BE jobs on the M3 Business Engine Jobs page, as well as download logs for any M3 BE user on the Business Engine Logs page.
M3 Business Engine	M3BE-FndUser	Users with this role can list and stop their own M3 BE jobs on the Business Engine Jobs page, as well as download their own dump logs on the Business Engine Logs page.
M3 Business Engine	M3BE-LogEnabler	Users with this role can configure logging, log levels, and profiling for their own M3 BE jobs on the M3 Business Engine Jobs page.

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**Administration Tools** 

**Experience Designer** 

Experience Designer Administrati...

**Business Engine Configuration D..** 

**Business Engine Data Management** 

**Business Engine Field Audit Trail** 

**Business Engine Files** 

Business Engine Interactive Prog..

**Business Engine Jobs** 

**Business Engine Logs** 

Cloud File Transfer Agent Admini...

**Configuration Management** 

Data Lake Publisher

**Event Analytics Rules** 

Event Hub

H5 Administration

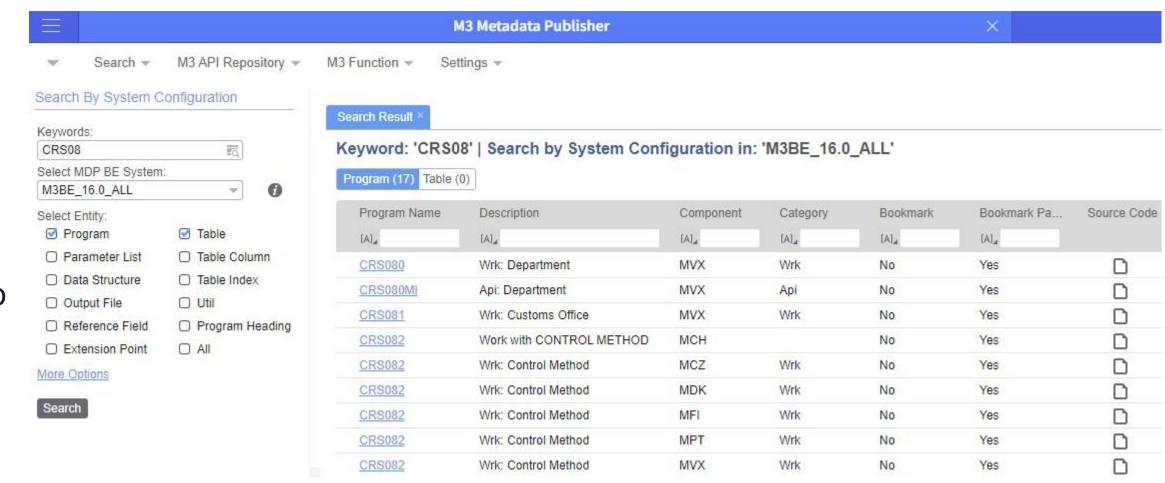
M3 Function Search Administration

M3 Metadata Publisher

M3CE About

### M3 Metadata Publisher

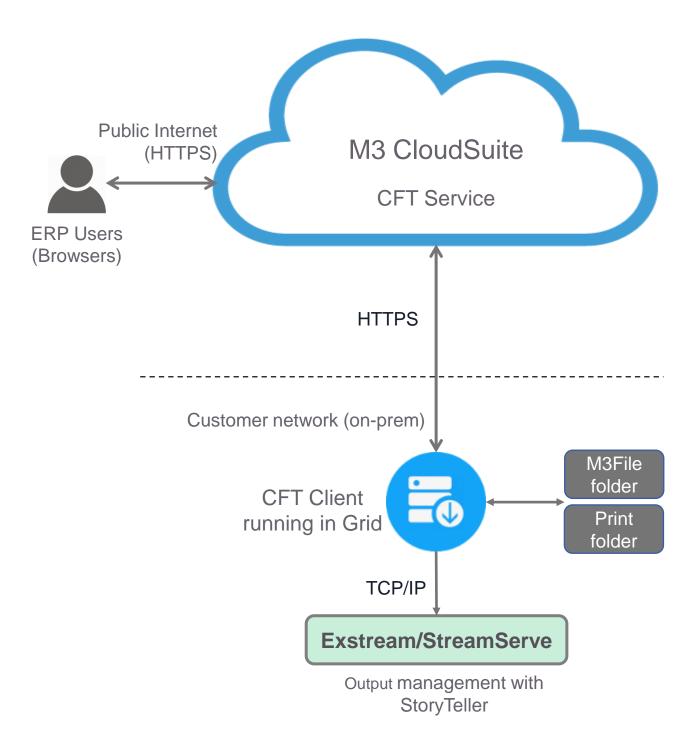
- Via MDP it is possible to explore M3 tables, fields, programs, API;s and relations
- MDP can also display M3 source code
- In MDP APIs can be explored and tested as an alternative to Swagger tool in ION Gateway
- API Test is connected to IFS security.



#### M3 CLOUD FILE TRANSFER

### **Cloud File Transfer**

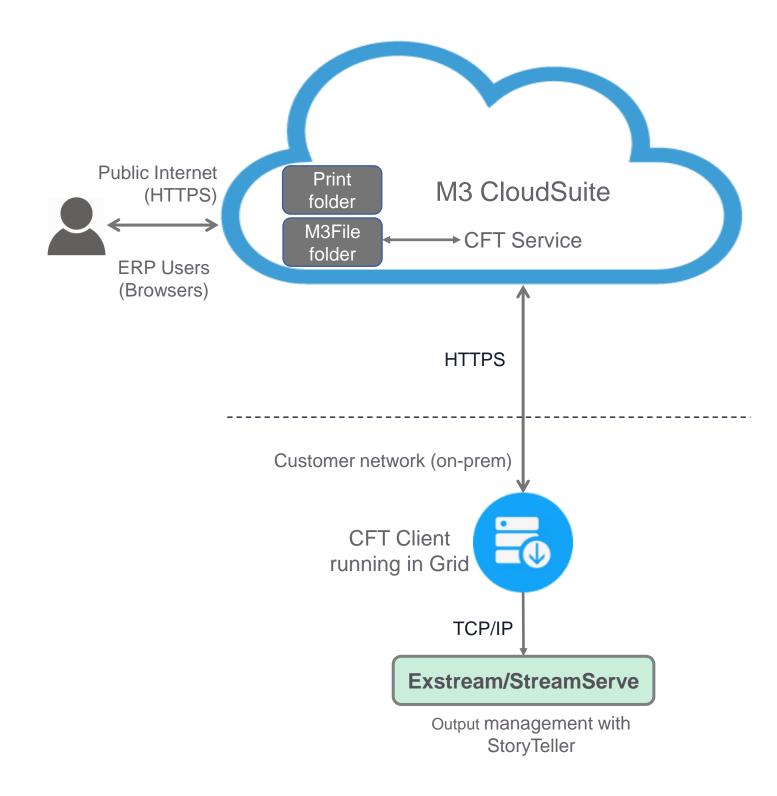
- CFT is a server-client application
  - CFT Service (Cloud) CFT Client (on-premises hosted by customer)
  - CFT Client run in Grid (Infor Application server)
    - Requires SQL Server Database
  - Download of CFT Client done from CFT Admin page
    - Installation package with Grid and certificate used for cloud communication
    - Documentation
      - M3 Cloud Configuration Guide link
      - M3 Core User and Administration Guide link



#### M3 CLOUD FILE TRANSFER

### **CFT with Cloud Storage**

- M3 files stored in cloud
  - MVX File Transfer
  - Data Management (Export/Import)
  - **Configuration Data**
  - FAT Exports
- Move of print files to CFT Client
  - CFT Client send prints to Exstream/StreamServe
    - Configuration for print server and port is set in M3 BE
- Saved printouts stored in cloud
  - marked with option "save" in M3 BE



### Data Management enhancement for XtendM3 tables

- Data Management for XtendM3 Dynamic Tables (EXT component), has been aligned with standard functionality (MVX and Mxx components)
- **Enhancement includes:** 
  - Export/import tables based on Company and Division
  - Clear target table at import
  - Delete company
- Note, there are three differences to be aware of
  - Export based on date is not an option for XtendM3 Dynamic Tables
  - It will still be possible to export/import XtendM3 tables without CONO field as to not introduce breaking changes
    - Therefor, it will be possible to select "All" as opposed to "All Companies" in the case of MVX component
  - Import from database is not available for the EXT component

Configuration Management - Introduction

### Introduction

### **Tooling**

Configuration Management is that allow configurations to be copied from one tenant to another (like from TST to TRN). This functionality is cross CloudSuite i.e., M3, Infor OS, ...

The information exported from one tenant is referred to as a local package.

A local package cannot be downloaded, it is stored in cloud for a limited time.

#### Value

- Structured handling of configurations
- Avoid errors from manual processes
- Lower cost of managing environments

General Availability is October 25, 2023

### Types of resources that can be moved

### **M3** Business Engine

Sorting option, Sorting order, Delivery methods, Rental reasons, Item type, Role, and more

### M3 Tech

Xtend M3, M3 UI artifacts, Experience Designer, GLT, M3 Portals, Sales Hub, Event Analytics, BOD Processor, Enterprise Collaborator, DLP, and more

### Infor OS

API Gateway, Coleman, Digital Assistant, Document Management, Infor OS Portal, ION, and more

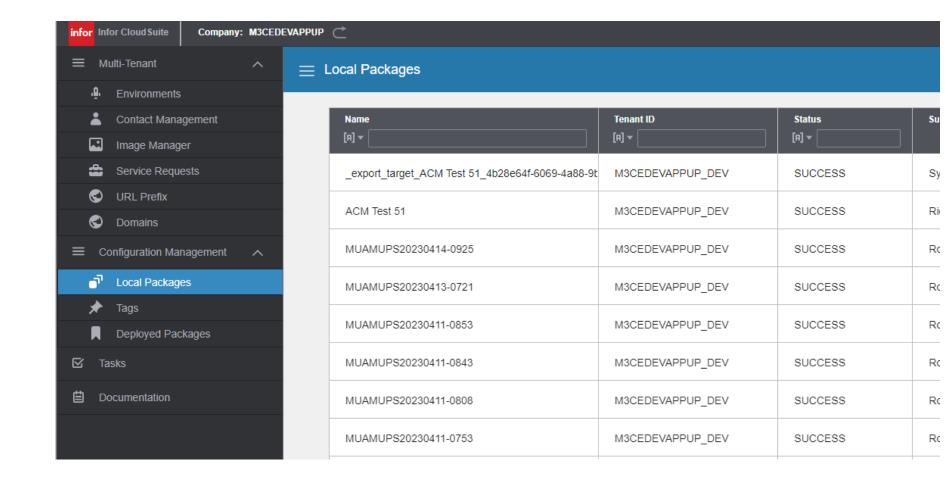
### Cloud Suite Self Service Portal

### **Configuration Management tooling**

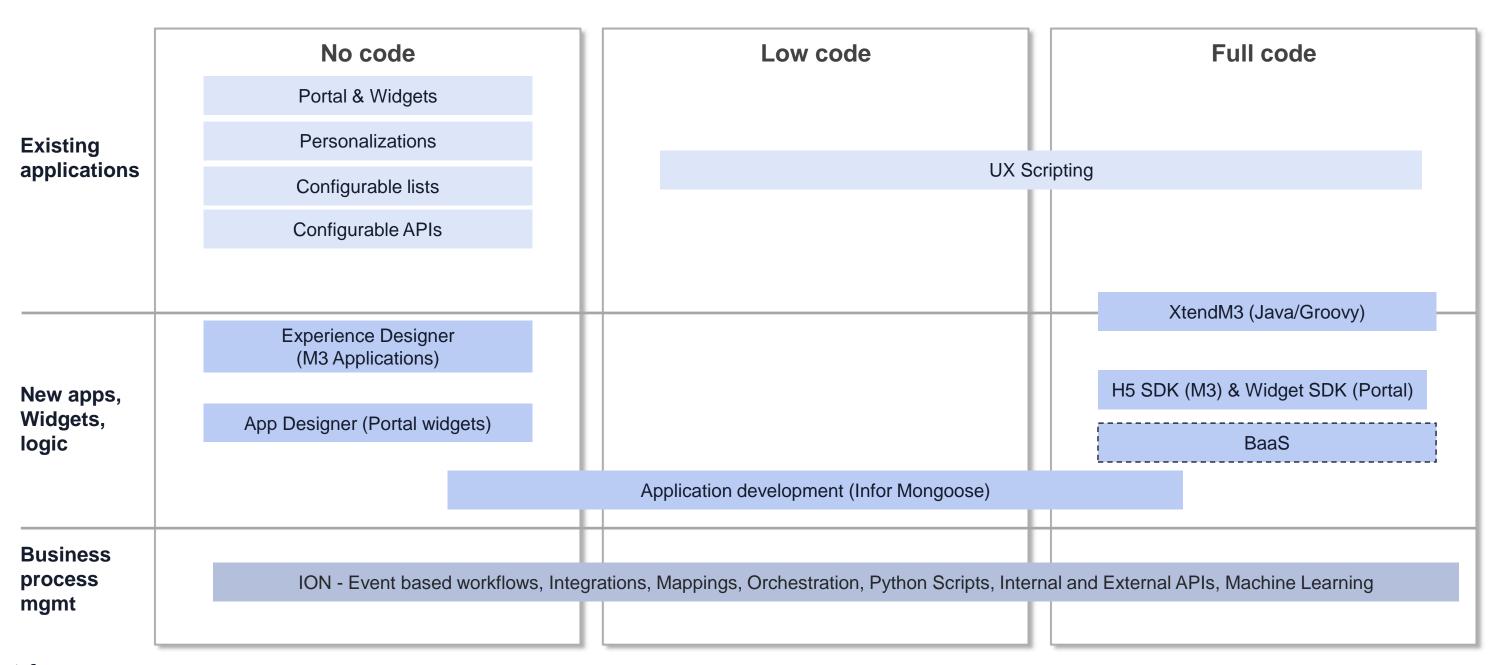
The main user interface is in Clod Suite Self Service Portal (CSSP), also called Self Service Portal (SSP), in the Configuration Management menu.

Tasks performed in SSP

- Create a Local Package
- Deploy a Local Package
- Maintain Tags



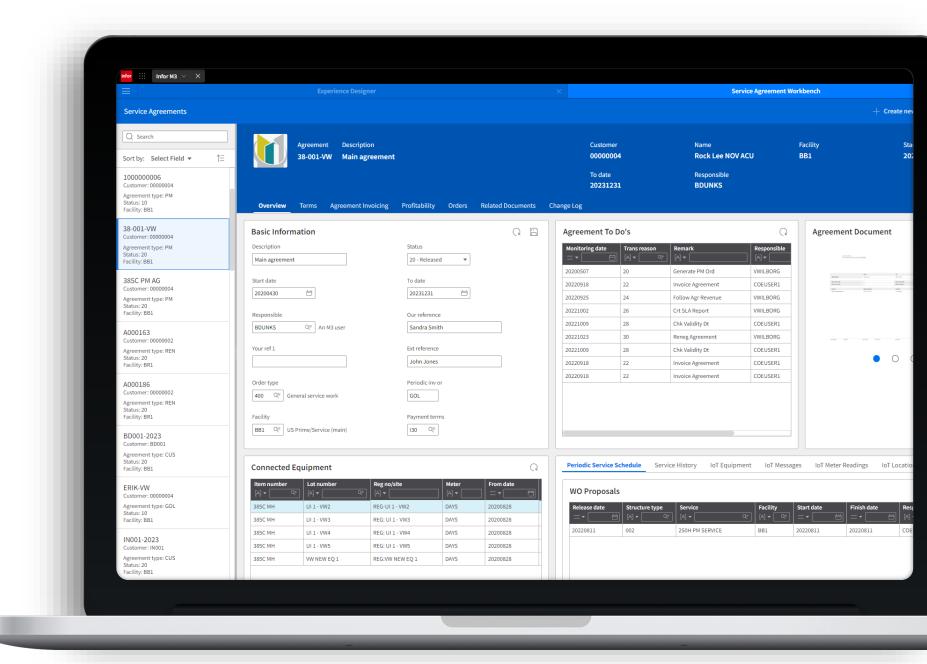
### Where does it fit in?



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### **Product Highlights**

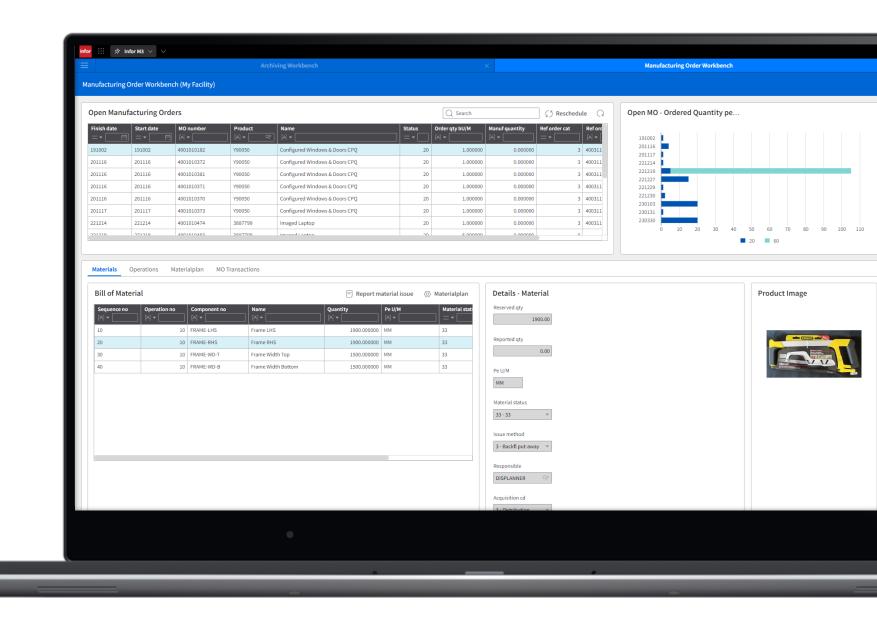
- No code solution Easy to learn, easy to use.
- UI components library
- Flexible interaction patterns
- Responsive layout
- Standardized interaction with API's
- Standard applications from M3 Development
- Templates, available at Marketplace in October



M3 Experience Designer

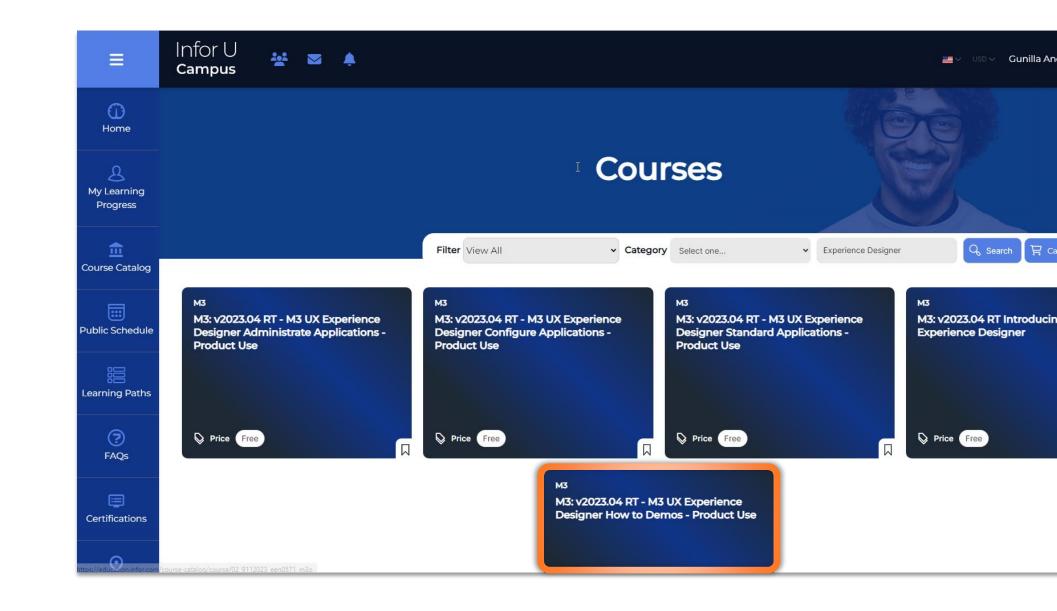
### **Prerequisites**

New H5 is needed, both for running applications, and for using the designer.



### How do I learn how to use Experience Designer?

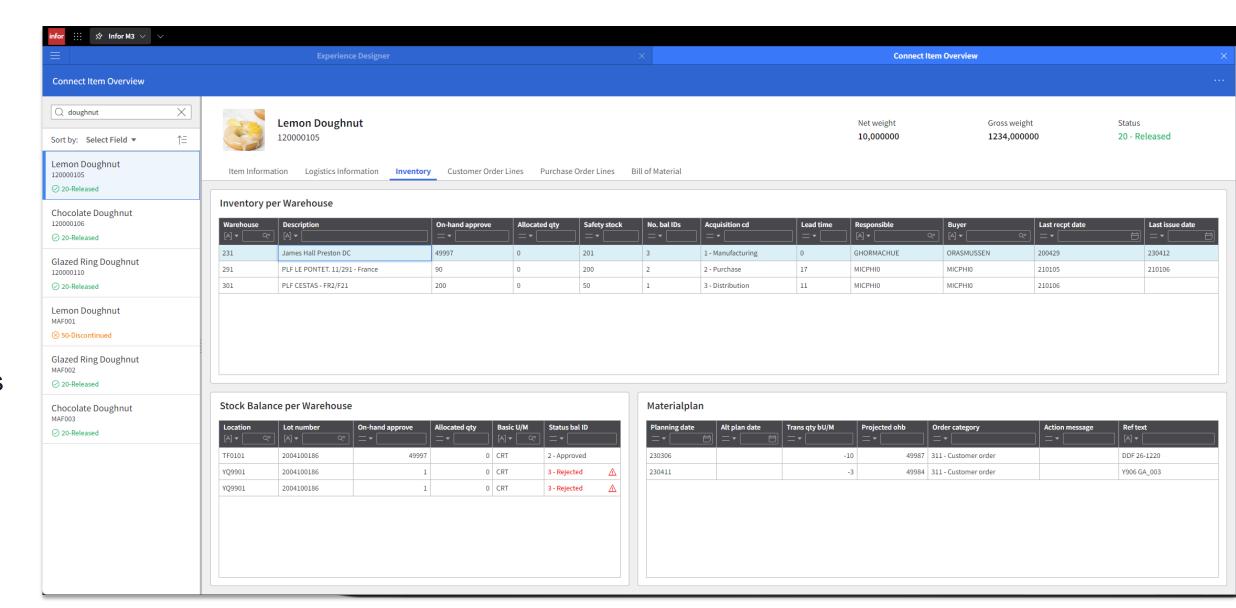
- Education videos on Infor U
- User and administration guides on docs.infor.com (M3 Core)
- KB 2295809
- Other areas you need to know:
  - API:s (Meta Data Publisher)
  - M3 Functional Search
  - CMS010/005



#### M3 Experience Designer

### What's next?

- Conditional styling
- Auto select first row
- Upload documents to IDM
- Button/Link component
- Group pane component
- Open app with default values



### **New user Portal**

This dynamic industry, and role, specific gateway is the ideal place for users to begin and end their day

The new Portal includes:



#### Workspaces

Complete tasks and get critical information with ease. Users can configure their Workspace or create a new one to personalise how they work



#### **Smart Panel**

Quick access to Inbox, Coleman Digital Assistant, and Smart Help without leaving the screen



#### **Navigation Menu**

Access Workspaces, bookmarks, and applications all in one place Infor OS Portal

### Enabling hyper-productivity for the end user

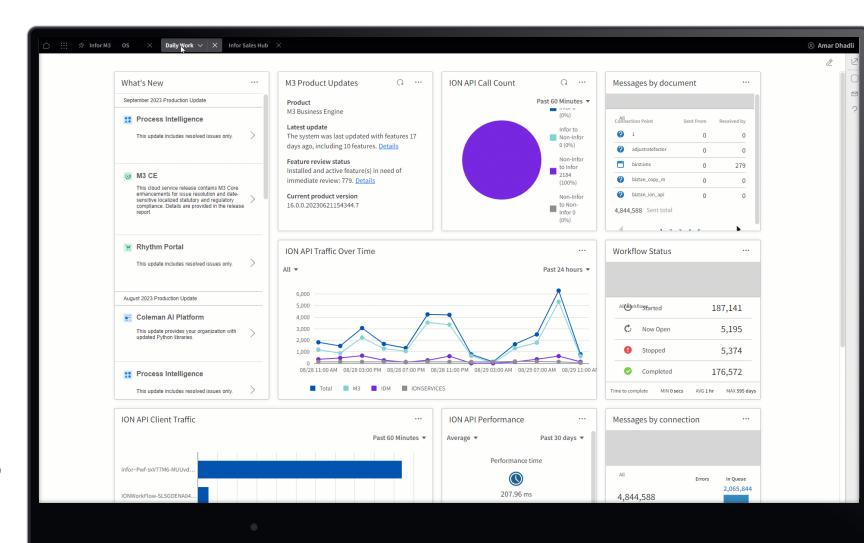


### Improved CloudSuite navigation

 Users can now access, manage, and personalise their applications, bookmarked screens, and Workspaces all in one place. So, they can multitask, and complete their work more easily using OS Portal

### Configurable Workspaces

 Users can leverage robust Workspaces configurability options, so they have the ideal place to start and end their day in their Infor CloudSuite



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### **Using Infor OS Portal**

### Infor OS Portal introduced and available for all customers in April 2023

- All new Infor Cloud deployments are Infor OS Portal only
- Existing Cloud customers (deployed prior to April 2023) can try it out and will have to switch over by April 2024
  - Ming.le interface will be retired in April 2024 (H5 Classic will also retire at the same time)
  - Note!! New H5 is a Prerequisite

#### CloudSuite Tenants are now in Trial mode

- You can migrate the content and configuration from Infor Ming.le and Homepages to Infor OS Portal
- You can migrate your data multiple times while your [TST/DEV] tenant is in the trial mode
- Data migration is not available when your tenant is in the finalised mode
  - Once set to "finalised" only OS Portal can be used Ming.le no longer accessible
- This must be done by April 2024

infor

Ux

TECHSTACK-18973

#### Infor OS Portal

### Increased limits for Tabs and Workspaces

#### Description

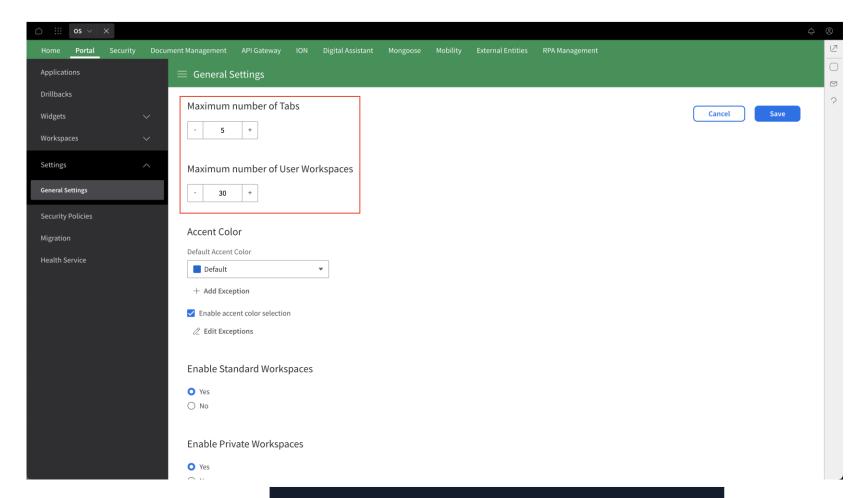
New parameters that determine how many Tabs and Workspaces an end user can have are introduced. Maximum limit is increased to 30.

#### Benefit/Value-to-Customer

- Configurability
- Increased limit from 20 to 30

#### **Use Case**

Go to Portal -> General settings. Configure the maximum tabs and workspaces you need.



Deployment Type

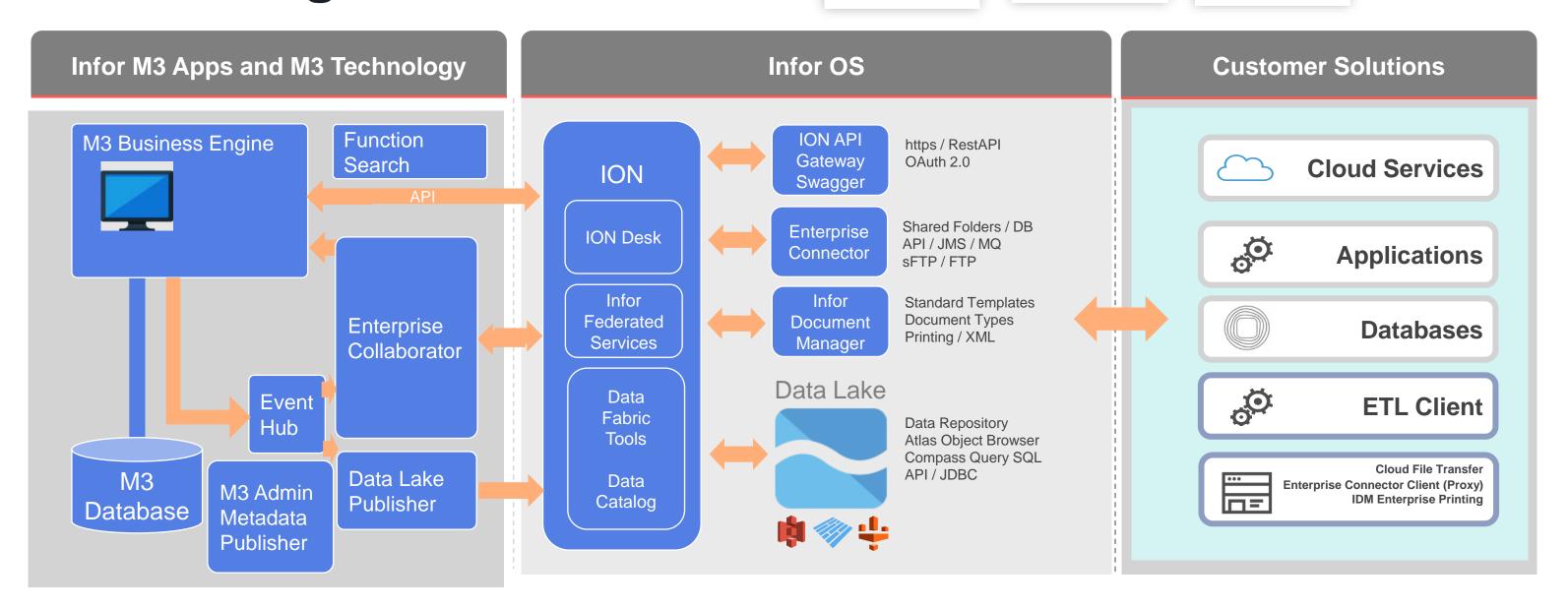
AWS

### **M3 CE Integration Architecture**

**Update** 

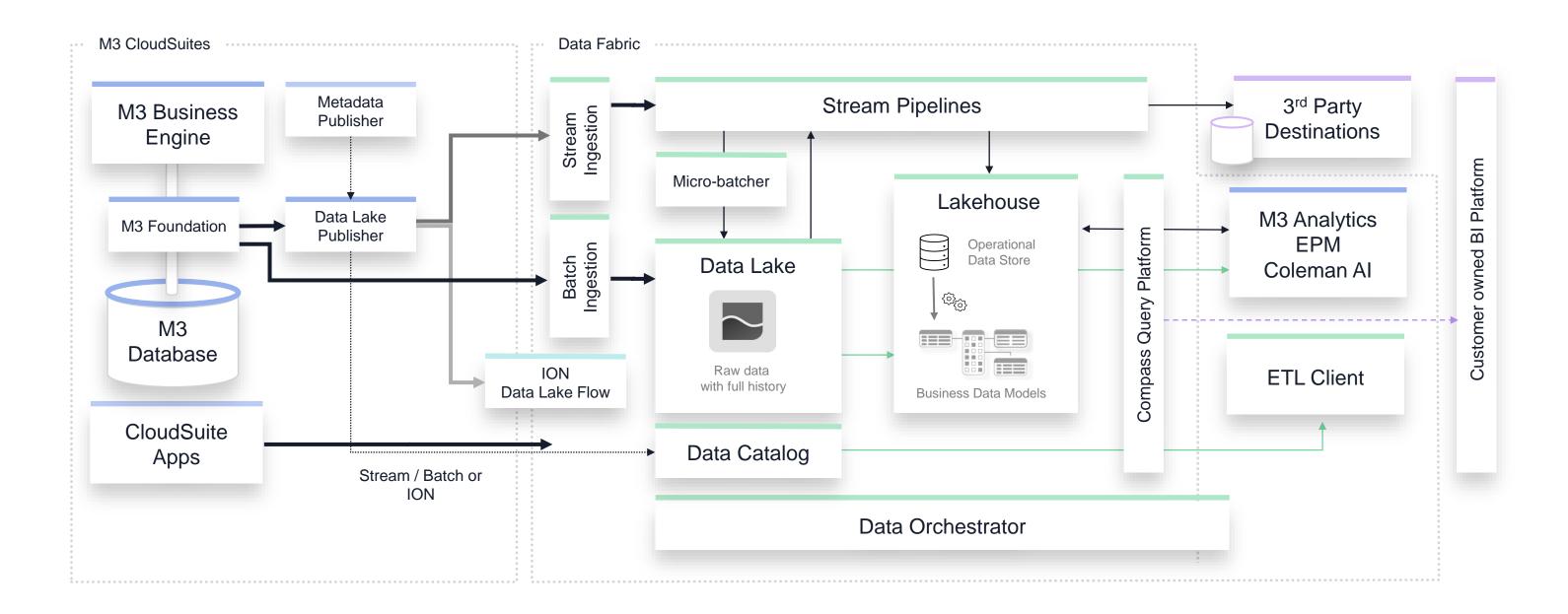
Build

**Publish** 



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### M3 and Data Fabric 2023



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### M3 Output Management options



#### **M3**

- Enhance Core M3 apps with Configurable XML
- Unlock new potential and capabilities via Configurable XML
- Configure existing M3 reports & docs
- (DEMO CMS005)



#### **IDM**

- IDM included with every M3 Cloudsuite
- New advanced formatting possibilities on roadmap
- Built upon a MS Works plugin ((DEMO)
- Excel output option
- Enterprise connector handles printing OnPrem



### **OpenText Exstream (OnPrem/Cloud)**

- Used for more advanced output options and requirements
- Can run alongside IDM
- OnPrem option can be used as previously with M3 OnPrem
- Cloud option exists, handled by OpenText
- Standard templates delivered by Infor in Storyteller format



### 3<sup>rd</sup> Party Output Solutions

- 3rd party solutions are available
- Possible to share the HTTPS connection
- No certification or support from Infor is available for this option

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### Standard Documents & Reports - Business Value

- We convert legacy documents and reports into customizable XML format for M3 CloudSuite
- These XML files are easily customized using configurable settings and managed with Infor Document Management
- Our open architecture supports connectivity with multiple Output Management platforms
- This flexibility lets customers choose the platform that suits their needs
- By using standardized XML files, we help streamline operations for quicker value realization

https://docs.infor.com/m3udi/16.x/en-us/m3beud/default.html

# Extension points for custom partner media control

#### **Executive summary**

This enhancement introduces extension points to Xtend M3, enabling customizable partner media control. Users gain precise control over output delivery logic, utilizing document values and diverse fields for tailored multi-channel distribution. While limited to variable fields, this advancement enhances communication flexibility and efficiency, ensuring personalized customer experiences.

#### Solution overview

**Problem** 

Existing partner media control lacked the flexibility needed for personalized output delivery, limiting options for diverse communication needs. Solution

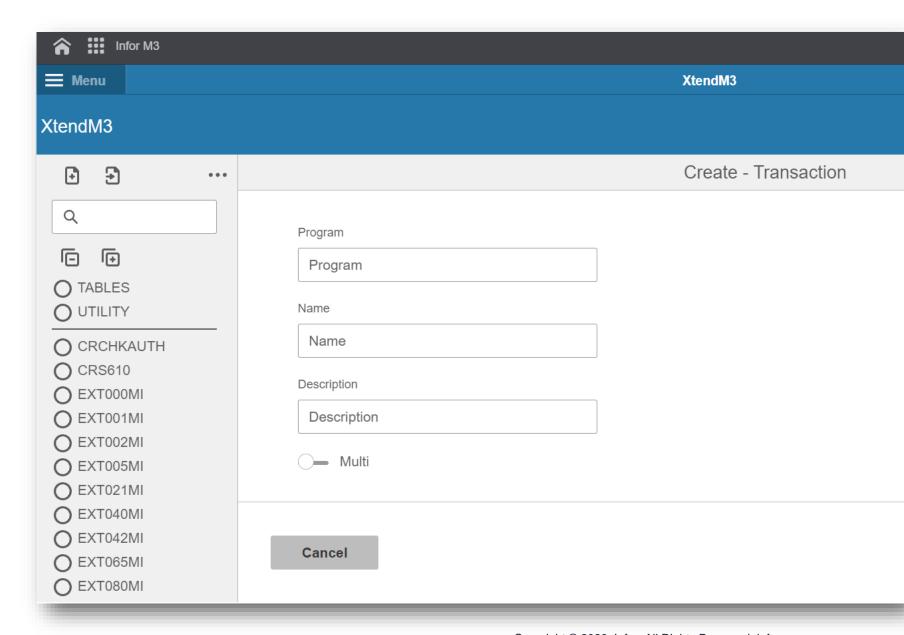
By integrating Xtend M3 extension points, a dynamic solution is introduced. This enables users to finely customize partner media logic based on document values and various fields.

#### **Benefits**

- √ This enhancement empowers customers √
  to tailor output delivery precisely.
  - The result is efficient multi-channel distribution, optimizing communication through emails, prints, and EDI.
  - √ This fosters a unique and tailored customer experience, enhancing communication effectiveness.

Additional details: KB 2305177

Decision Where to find more **Business** Technical CloudSuite(s) **Product Line** Persona/Role? information? Impact Impact KB 2275528 M3 Output All M3 **Output Master KB** Medium Medium End Users CloudSuites Management



#### Enterprise solutions

### **Extensibility in M3**



#### Mongoose

Independent workflow engine to build and deploy applications with integration to ION with no coding knowledge



#### H5 Script

Client-side scripting solution to build personalization around the UI



#### XtendM3

Server-side extensibility tool to extend and expand M3 Business Engine with deep integration in M3 ecosystem



#### App Builder / Web SDK

Client-side web applications to build custom UI based applications



#### BaaS

Backend as a Service to build serverless applications with managed lifecycle



#### Custom Field/List/Report

Personalization solution around custom fields and configurable lists and reports in M3

**INTRODUCING** 

### XtendM3

Customize M3 Business Engine logic with XtendM3 by writing your own Extensions.



#### Built on top of standard M3

Executed either directly or via extension points



### **Groovy Based**

Written in Groovy, a Java based language



#### Integrated with existing solution

Integrated with APIs, programs and resources in M3



#### Provided as a service

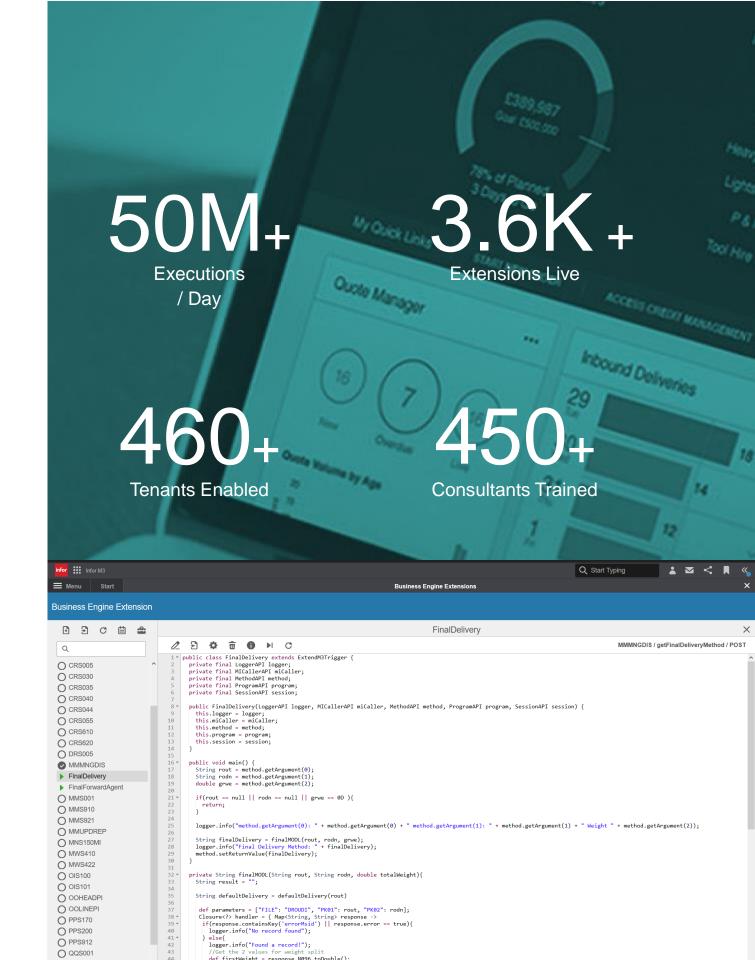
Developed by selected Infor consultants or selected partners

#### **Enterprise solutions**

### XtendM3

### **Architecture Capabilities**

- Custom Data Model
  - Transaction data compatibility
- Custom APIs
  - On-Fly new API capabilities
- Custom Batch Programs
  - Run time/transaction intensive in background
- Custom Extensions
  - Customize internal behavior of Business Engine
- Instant impact
  - On-fly activation/deactivation and updates both on extensions and tables



### Dagens ämnen

Introduktion

Det bästa från M3 Connect – "Mission impossible"

Huvudpresentation observationer

Arkitektur framtid

M3 Administration

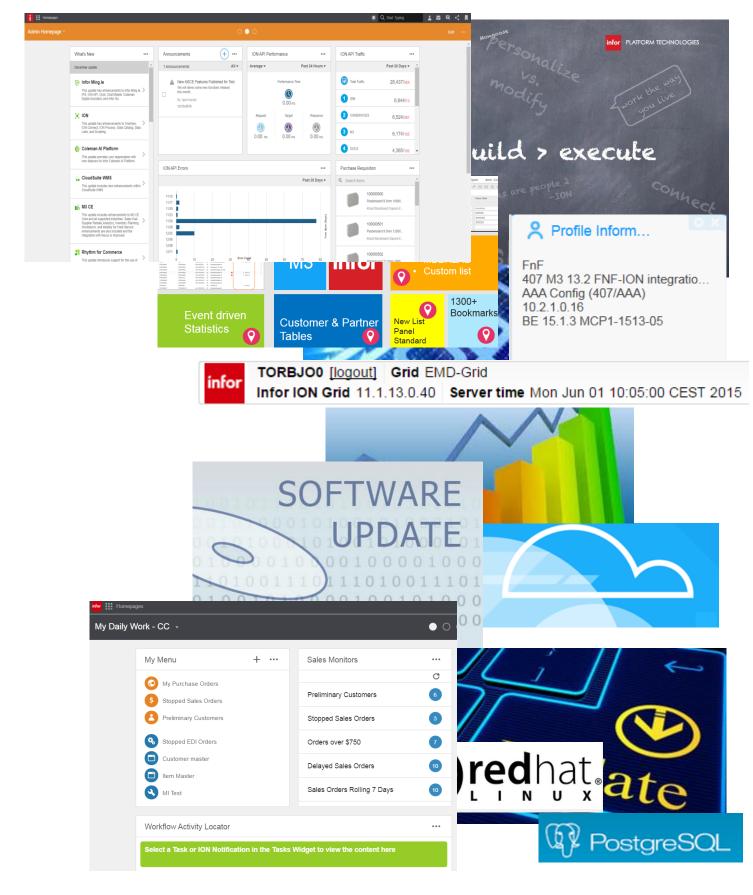
Användarupplevelse

Integrationer

**Dokument** 

Verktyg för kundunika och molnsäkrade anpassningar

Avslutning med frågor och information om nästa Tips&Tricks



### **Infor M3 Connect**

### Thank you

Questions?

Please reach out to: Matilde.Thorsoe@infor.com

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Smart. Preconfigured. Modern.