

10 YEAR ANNIVERSARY
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Cloud Migration

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MICROSOFT

www.bctechdays.com

In this session:

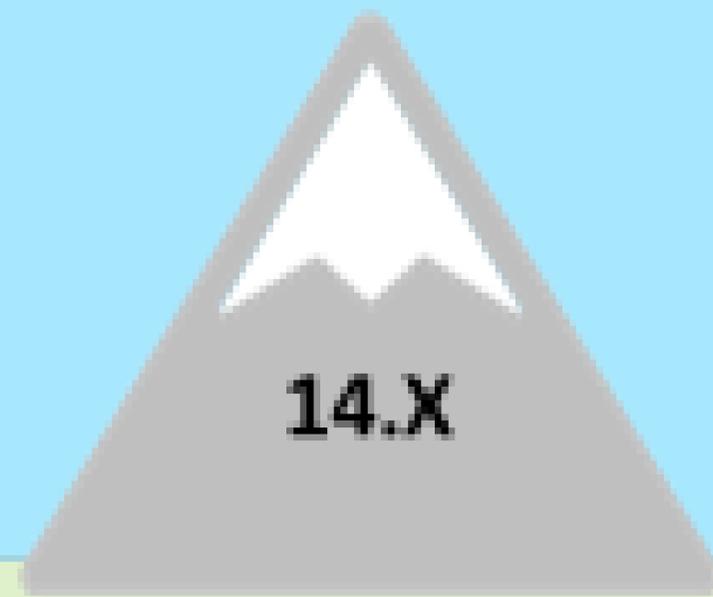
- Journey Overview
- Prepare for your Cloud Migration journey
- Setting up Cloud Migration
- Migrating your data to the cloud
- Upgrade the replicated data
- API for Cloud migration

Journey to Cloud



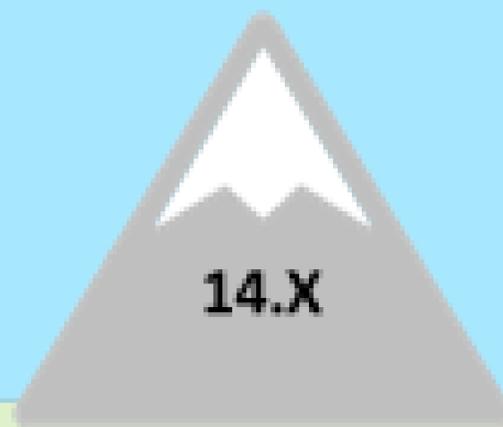
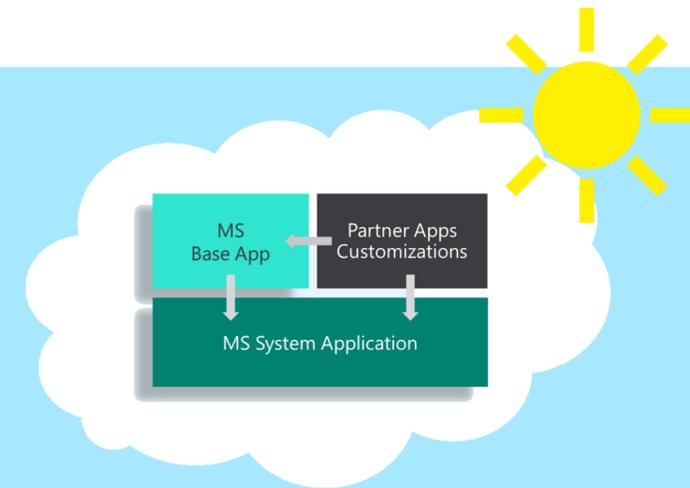
$$C/AL + AL$$

Journey to Cloud

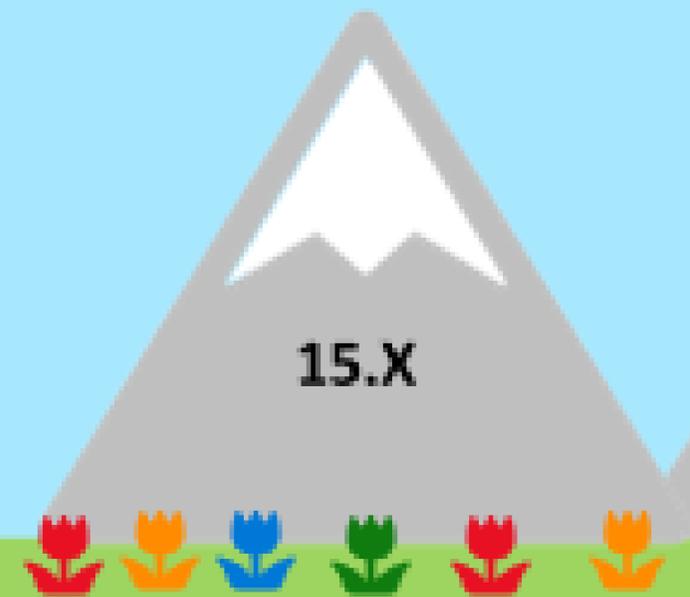


$C/AL + AL$

Journey to Cloud – BC TechDays 2019

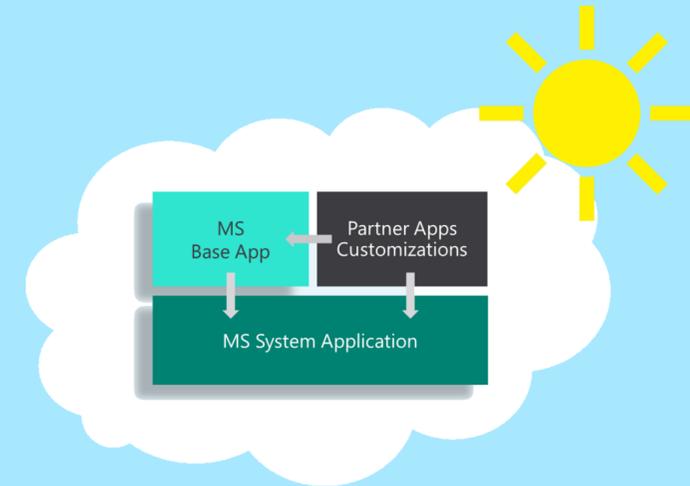


C/AL + AL



AL

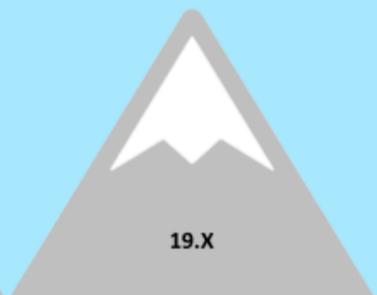
Journey to Cloud



C/AL + AL



AL

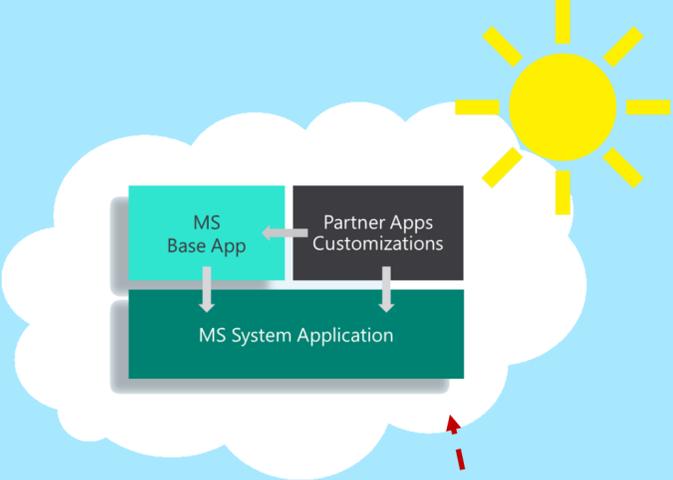


Journey to Cloud

Step 1.
Upgrade to 14.x

Step 2.
Upgrade to 21.x

Step 3.
Replicate Data to SaaS



C/AL + AL

AL

14.X

15.X

16.X

17.X

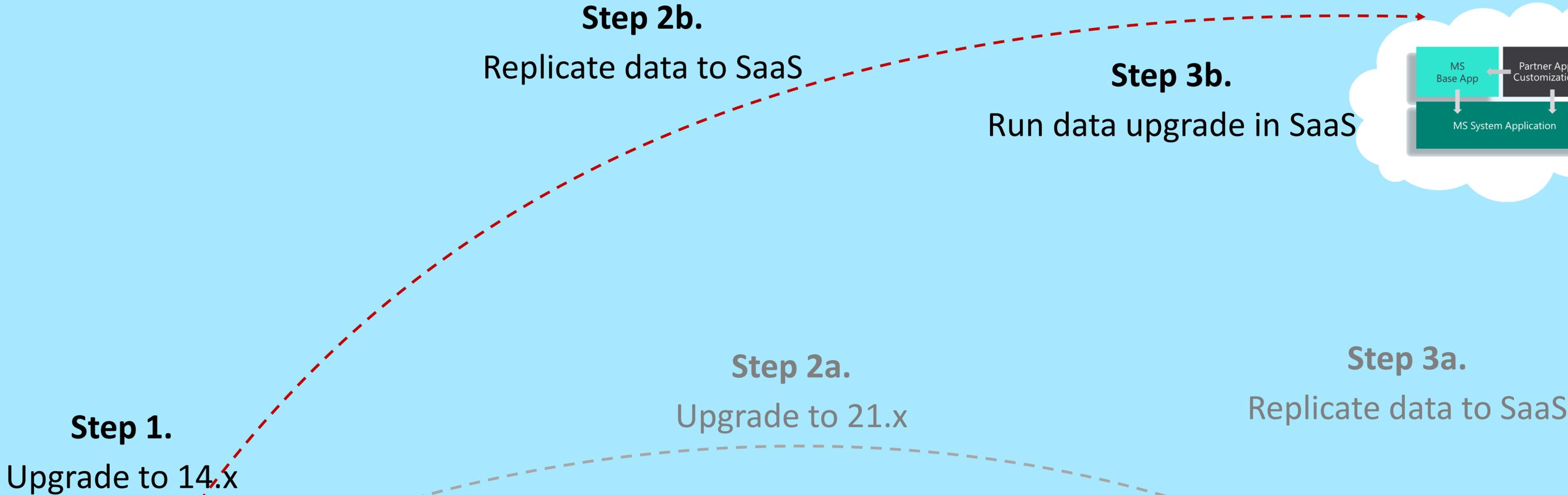
18.X

19.X

20.X

21.X

Journey to Cloud



C/AL + AL

AL

14.X

15.X

16.X

17.X

18.X

19.X

20.X

21.X

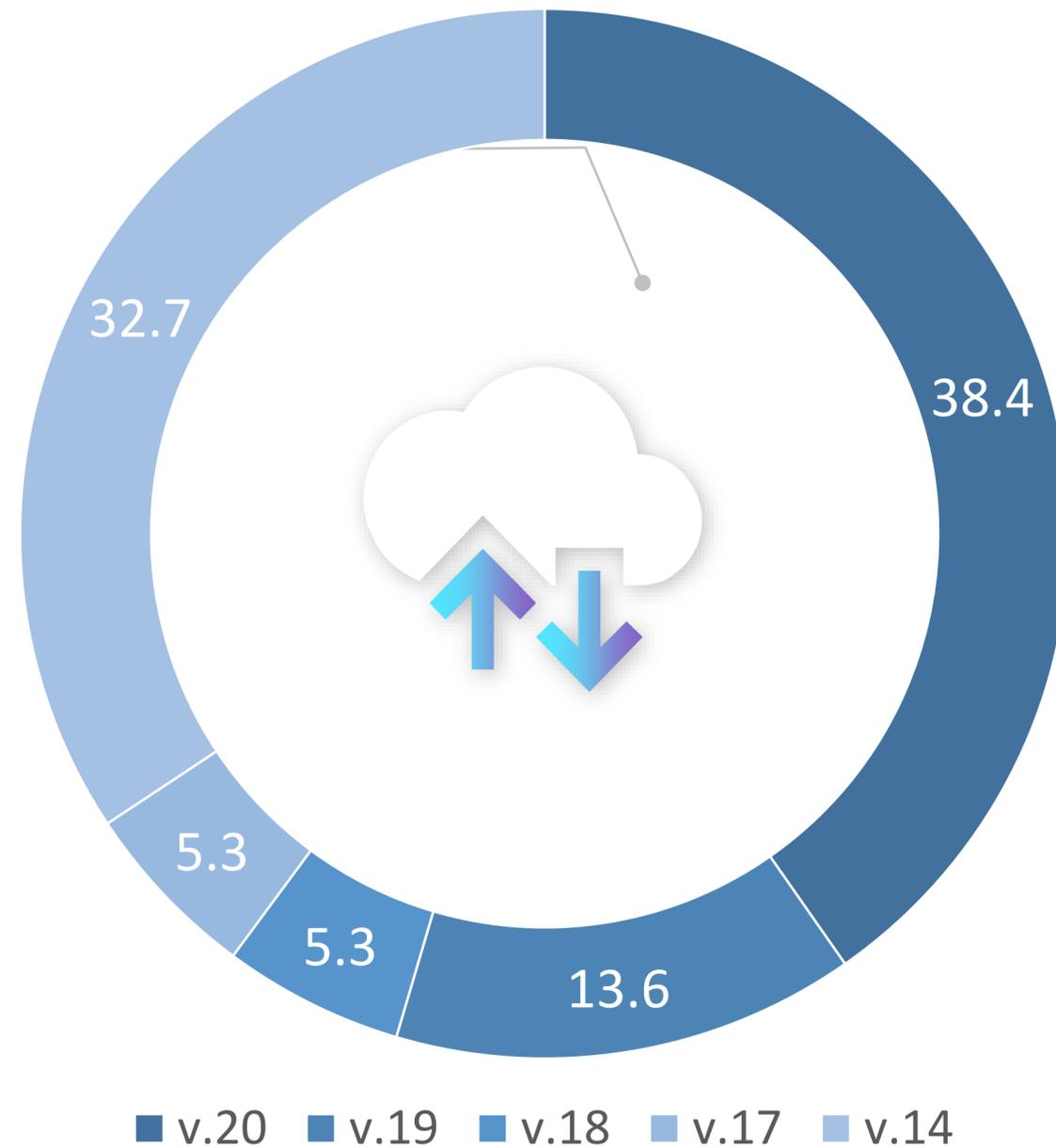


Cloud Migration

564 unique customers

used the migration tool within the last
30 days

In the last 30 days, **38.4% of cloud migrations** were done from **version 20**



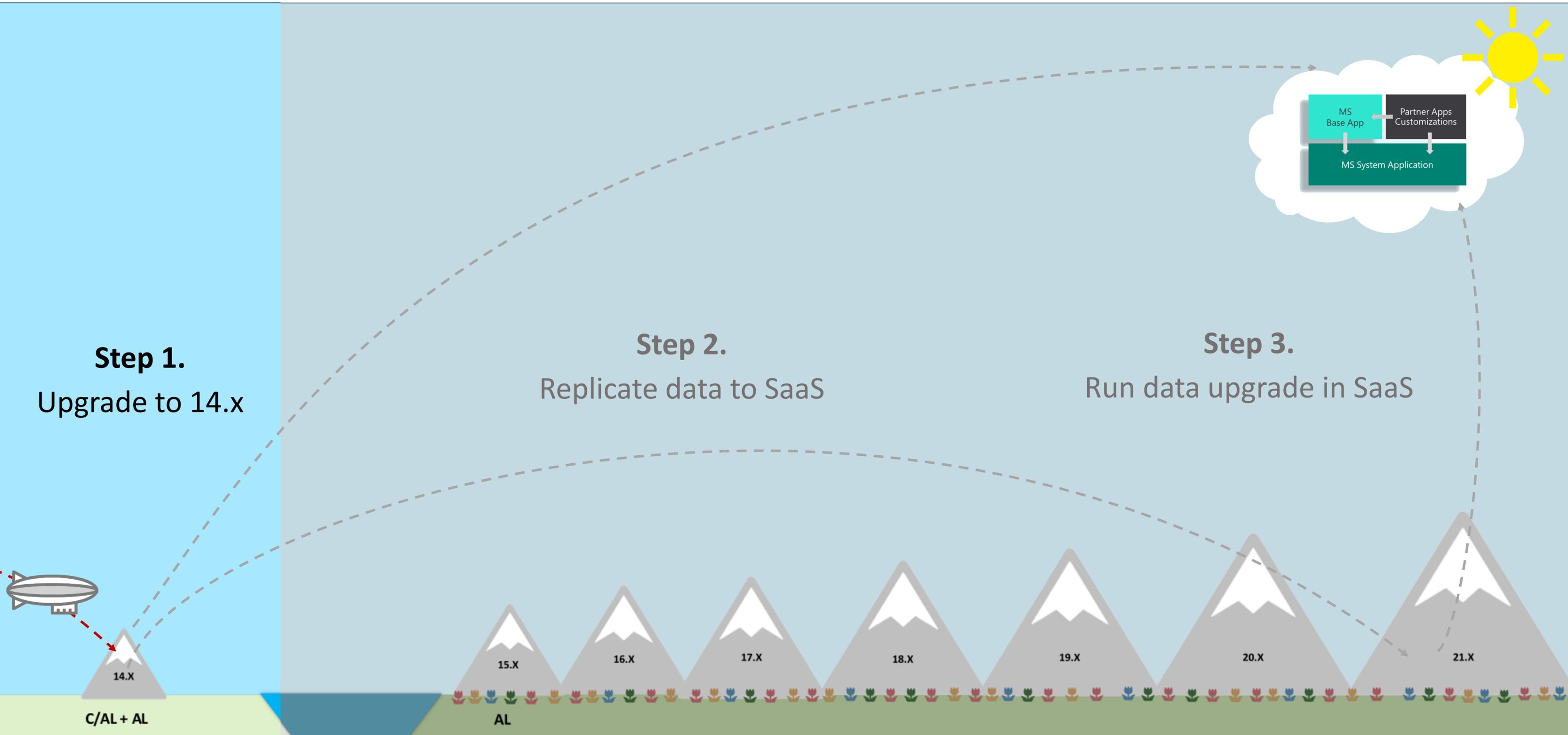
Migration from previous versions to v.21 is **available with 2022 release wave 2**

2022 release wave 2
(version 21)



Versions
14, 15, 16, 17, 18,
19, 20

Part 1 – On-Prem Data Upgrade



Prepare for your Cloud Migration Journey



1. Align the Table Definitions
2. Cleanup the data

Align the Table Definitions

```
table 18 Customer
{
  fields
  {
    field(1; "No."; Code[20])
    {
    }
    field(2; Name; Text[100])
    {
    }
    ...
    field(50100; "Pte1 Field1"; Code[20])
    {
    }
    field(50101; "Pte1 Field2"; Integer)
    {
    }
  }
  keys
  {
    key(Key1; "No.")
    {
      Clustered = true;
    }
    ...
    key(Key22; "IC Partner Code")
    {
    }
  }
}
```

Must:

- Align the primary keys
- Align field names and data types

Cloud migration can handle: *

- Different table names (Table mapping)
- Missing or extra fields (Excluded – Work in progress)
- Different IDs (N/A)
- Secondary keys (N/A)

* Needed for OnPrem upgrade to AL

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Cleanup the data

Cleanup Data - Corrupted Code fields

Invalid characters in Code fields

Lowercase, newline, carriage return, tab...

Any modification will fail

Problems with displaying the records in the UI

```
SELECT *  
FROM [dbo].[CRONUS US Migrate 0365$Customer]  
WHERE [No_] like '%' + Char(10) + '%'
```

timestamp	No_	Name	Search Name
0x000000000000D76CA	10000	Adatum Corporation	ADATUM CORPORATION
0x000000000000D76CD	20000	Trey Research	TREY RESEARCH

```
local procedure UpdateCustomers()  
var  
    Customer: Record "Customer";  
begin  
    if Customer.FindSet() then  
        repeat  
            Customer.ChangeValues();  
            Customer.Modify();  
        until Customer.Next() = 0;  
    end;
```

Invoke-NAVSanitizeField

Reference

Module: [Microsoft.Dynamics.Nav.Management](#)

Invokes the sanitize field operation on the specified tenant.

Syntax

PowerShell

 Copy

```
Invoke-NAVSanitizeField
    [-RemoveDuplicates]
    [-ServerInstance] <String>
    [-Tenant <TenantId>]
    [-CompanyName <String>]
    [[-TableId] <Int32>]
    [[-FieldId] <Int32>]
    [-Force]
    [-WhatIf]
    [-Confirm]
    [<CommonParameters>]
```

- Run once on a copy of the database to identify tables with problems
- Sanitize the data (-TableId parameter)
- Recommendation:
Fix the Live Instance (before upgrade/migration)

Fix Company Names

No special characters allowed

Similar to code fields

Cloud migration will not pickup the company

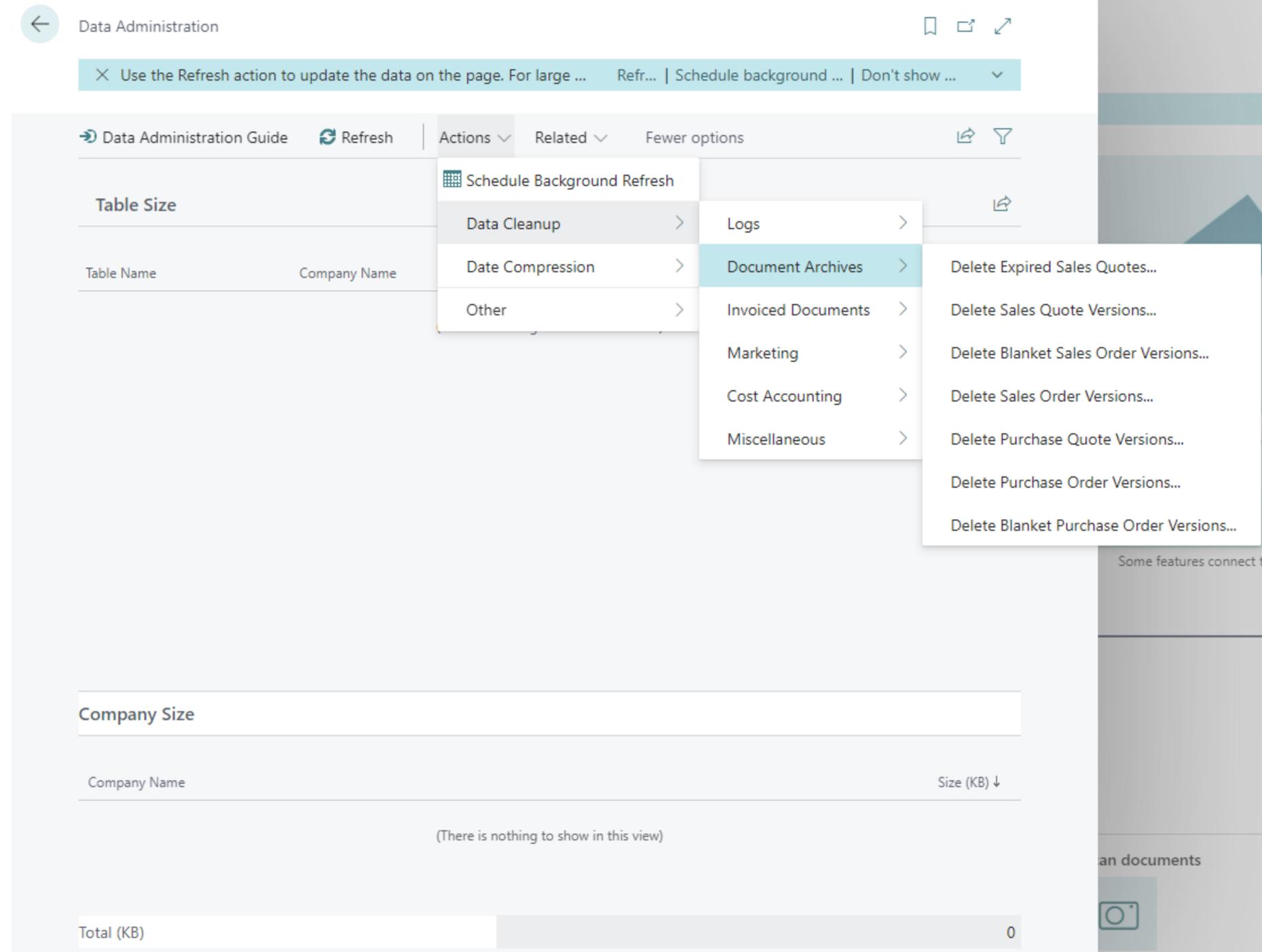
Rename the companies before migration

```
SELECT * FROM Company WHERE
([Name] like '% ') or           --Trailing spaces
([Name] like ' %' ) or         --Leading spaces
([Name] like '% ' + Char(10) + '%') or --Line feed
([Name] like '% ' + Char(13) + '%') --Carriage return
```

Cleanup the data - Data Archive page

Run reports to
compress/archive the data

Data Archive page – Page Id
9035



The screenshot shows the 'Data Administration' page in Microsoft Dynamics NAV. The page title is 'Data Administration'. A notification bar at the top states: 'Use the Refresh action to update the data on the page. For large ... Refr... | Schedule background ... | Don't show ...'. The main content area has a header with 'Data Administration Guide', 'Refresh', and 'Actions' (selected). The 'Actions' menu is open, showing 'Schedule Background Refresh', 'Data Cleanup', 'Date Compression', and 'Other'. The 'Data Cleanup' option is selected, opening a sub-menu with 'Logs', 'Document Archives', 'Invoiced Documents', 'Marketing', 'Cost Accounting', and 'Miscellaneous'. The 'Document Archives' option is selected, opening a final sub-menu with the following options: 'Delete Expired Sales Quotes...', 'Delete Sales Quote Versions...', 'Delete Blanket Sales Order Versions...', 'Delete Sales Order Versions...', 'Delete Purchase Quote Versions...', 'Delete Purchase Order Versions...', and 'Delete Blanket Purchase Order Versions...'. Below the menu, there is a table with columns 'Table Name' and 'Company Name'. A 'Company Size' section is visible, with a table header 'Company Name' and 'Size (KB) ↓'. The table is empty, with the message '(There is nothing to show in this view)'. At the bottom, there is a 'Total (KB)' field showing '0'.

Part 2 – Data Replication

Step 1.
Upgrade to 14.x

Step 2.
Replicate data to SaaS

Step 3.
Run data upgrade in
SaaS

14.X

C/AL + AL

15.X

AL

16.X

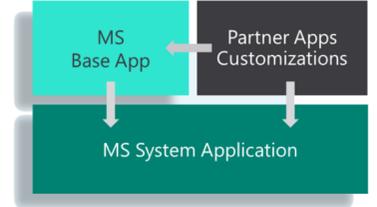
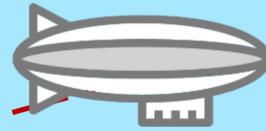
17.X

18.X

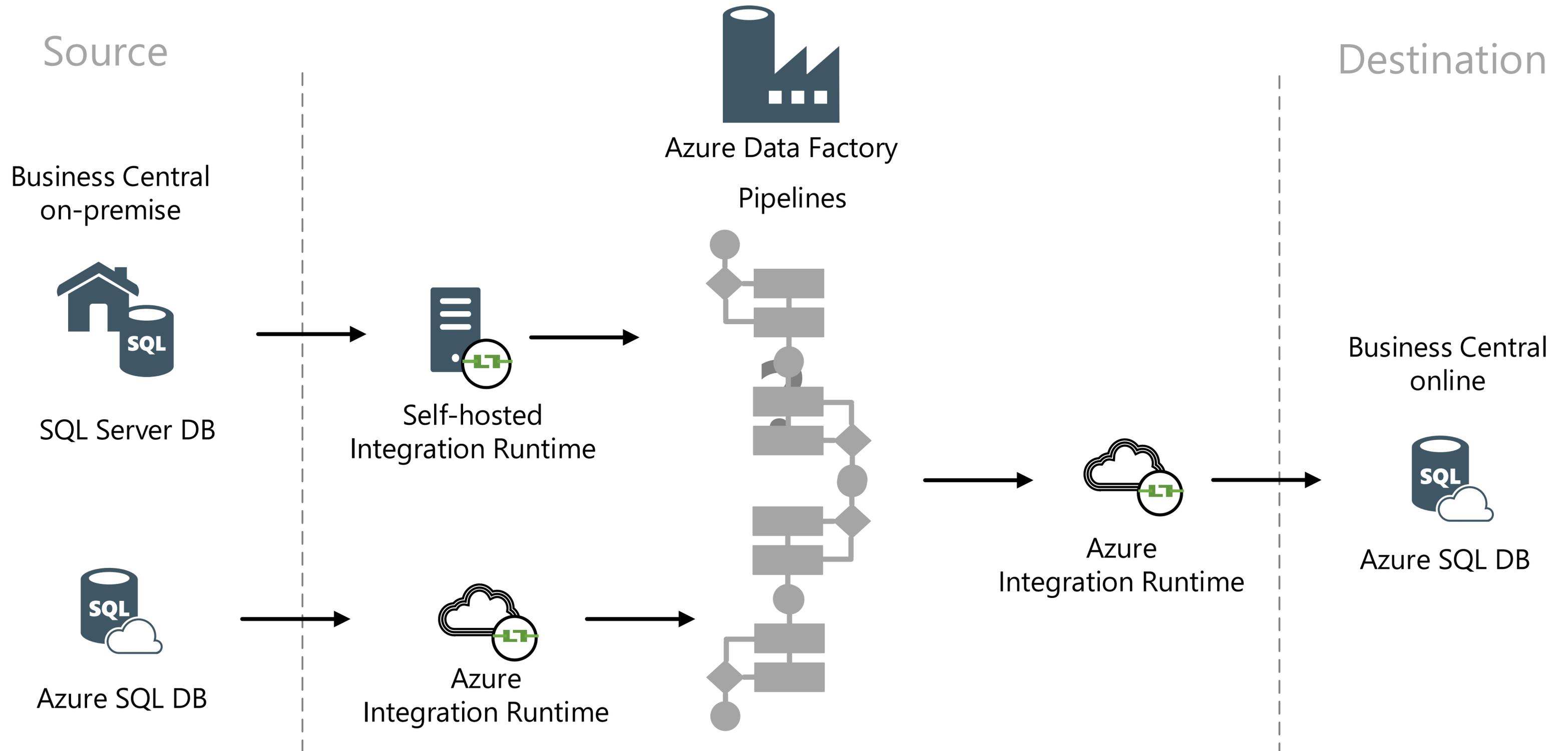
19.X

20.X

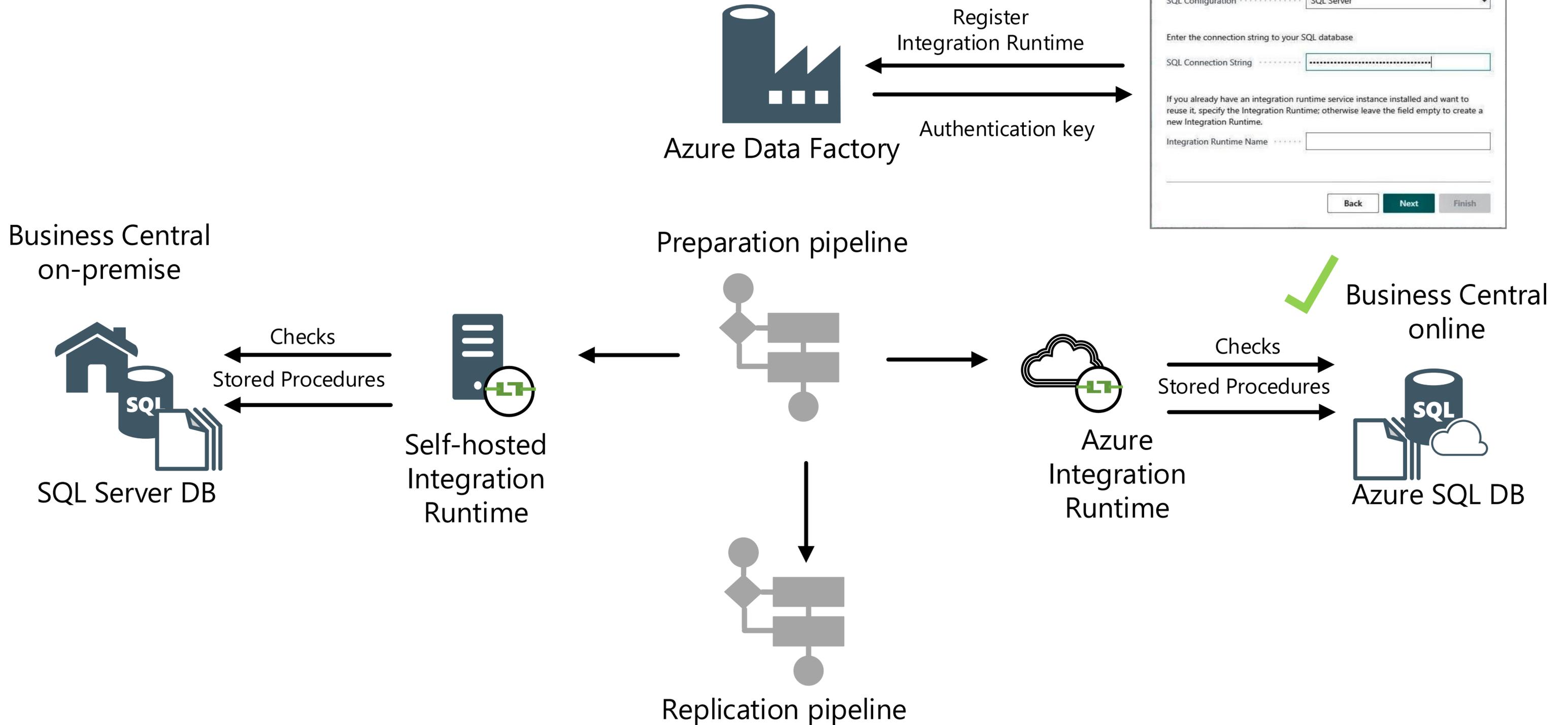
21.X



Cloud Migration "under the hood"

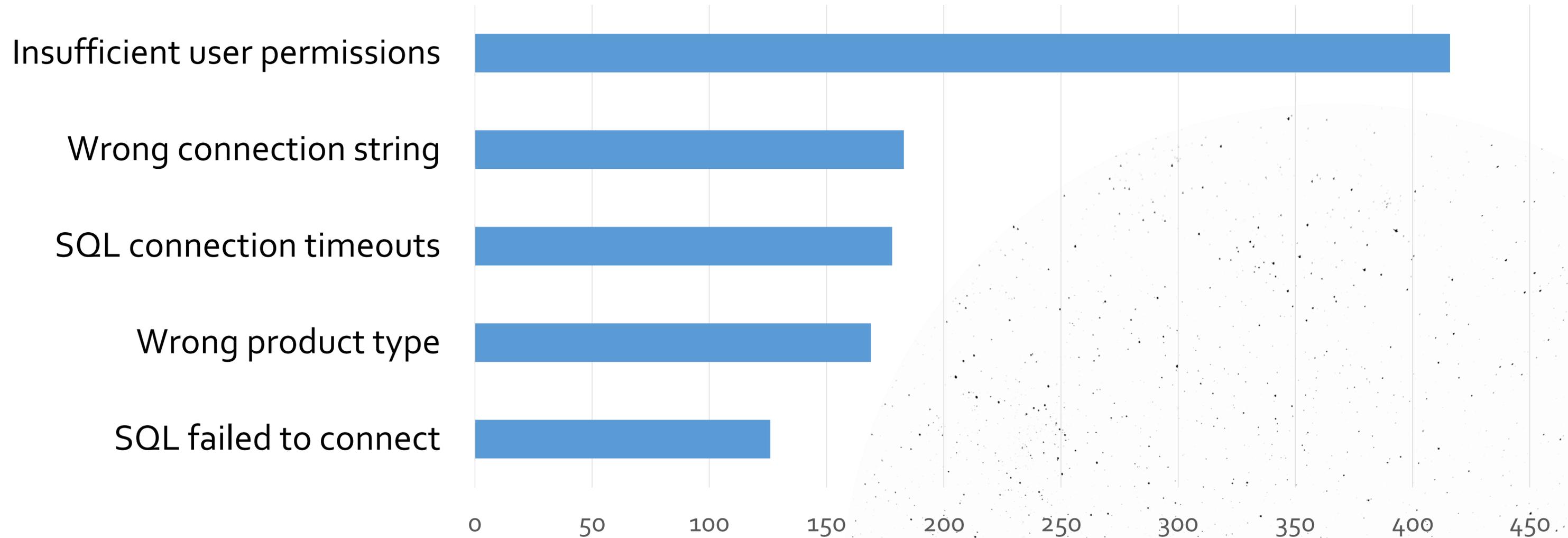


Cloud Migration Setup



Cloud Migration Setup – common errors

Top 5 errors during Setup (last 30 days)



Cloud Migration Setup – common errors

Insufficient user permissions (BC user + SQL user)

Typical error messages

- Invoking Web Activity failed with HttpStatusCode - '500 : InternalServerError'
- You do not have permission to create or run scheduled tasks
- The EXECUTE (or SELECT) permission was denied on the object ...
- User does not have permission to perform this action

Mitigation

- SUPER role for the BC user setting up Cloud Migration
- Customer consent for the delegated admins
- SQL user needs:
 - sysadmin server-level role
 - db_owner database role

Cloud Migration Setup – common errors

Wrong connection string

Typical error messages

- Message=Invalid database connection string provided
- Message=Keyword not supported: ...

Example

Message=Keyword not supported: 'userid'

- Message=Value cannot be null.
Parameter name: ...

Example

Message=Value cannot be null.
Parameter name: password

Mitigation

- Connection string for on-premise DB:
`Server={Server Name\Instance Name};
Database={Database Name};
User Id={SQL Server Authenticated UserName};
Password={SQL Server Authenticated Password};`

(found in BC documentation:

<https://docs.microsoft.com/en-us/dynamics365/business-central/dev-itpro/administration/migrate-data#specify-the-sql-connection>)

- Connection string for Azure SQL:
`Server=tcp:{ServerName}.database.windows.net,1433;
Initial Catalog={Database Name};
Persist Security Info=False;
User ID={SQL Server Authenticated UserName};
Password={SQL Server Authenticated Password};
Encrypt=True;`

(found in: Azure portal, SQL database resource, Connection strings)

Cloud Migration Setup – common errors

SQL connection timeouts

Typical error message

Activity timed out

Mitigation

Check requirements for Self-Hosted Integration Runtime host (.NET 4.72)

Database query performance optimization:

- Update statistics:

```
EXEC sp_updatestats;
```

- Reorganize indexes:

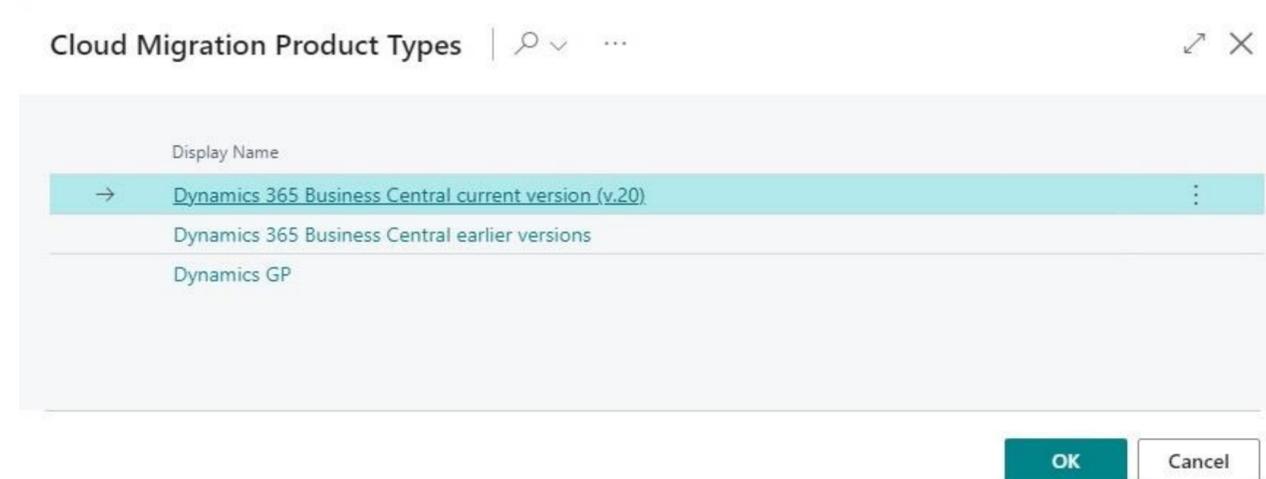
```
EXEC sys.sp_MSforeachtable 'ALTER INDEX ALL ON ? REORGANIZE'
```

<https://docs.microsoft.com/en-us/dynamics365/business-central/dev-itpro/deployment/installation-considerations-for-microsoft-sql-server#database-configurations>

<https://docs.microsoft.com/en-us/sql/relational-databases/indexes/reorganize-and-rebuild-indexes?view=sql-server-ver16>

Cloud Migration Setup – common errors

Wrong product type



Typical error message

- Failed to enable your replication. Make sure your integration runtime is successfully connected and try again.

Mitigation

- Choose *current version* if the major versions of the on-premise database and the cloud environment are the same, e.g.
 - on-premise v.20.1 and cloud v.20.3 -> current version
 - on-premise v.14.3 and cloud v.20.3 -> earlier versions
- Ensure correct version in the on-premise database:

```
SELECT [applicationversion]
FROM [$ndo$tenantdatabaseproperty]
```

Cloud Migration Setup – common errors

SQL failed to connect

Typical error messages

- ErrorCode=SqlFailedToConnect
Message=Cannot connect to SQL Database
- Check the linked service configuration is correct, and make sure the SQL Database firewall allows the integration runtime to access.
- Login failed for user ...
- Client with IP address '...' is not allowed to access the server.
- The server was not found or was not accessible.

Mitigation

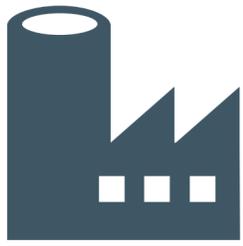
- Verify the user can connect to the on-premise DB
- Check Integration Runtime access to the SQL Server

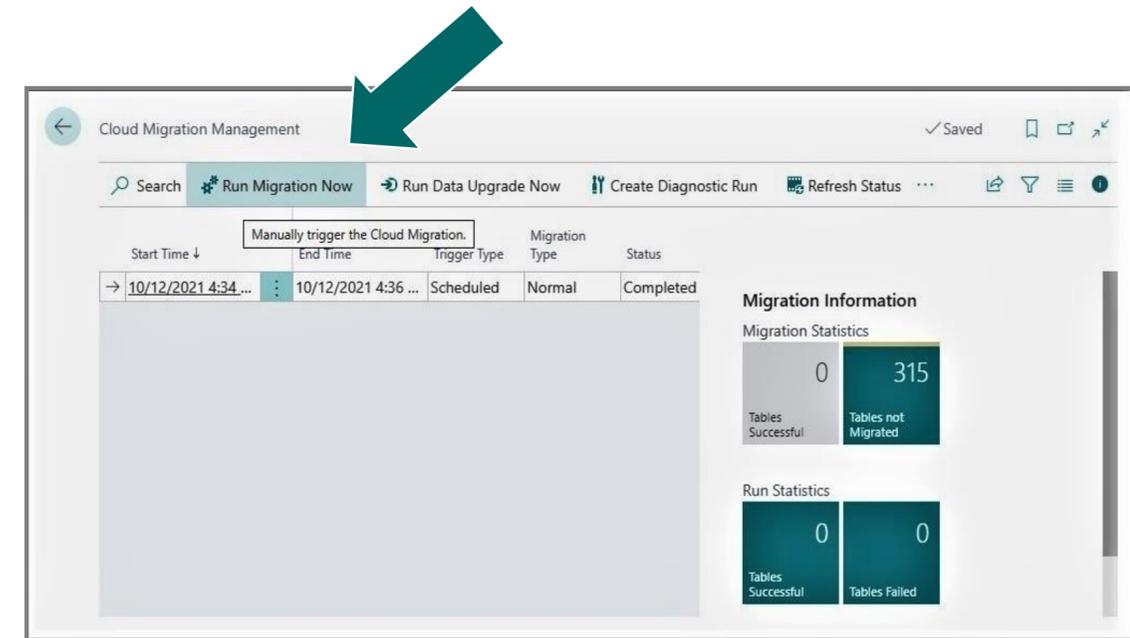
On the machine with IR run a Powershell command:

```
sqlcmd -S "{SQL Server Name}"  
        -d "{Database Name}"  
        -U "{SQL Server Authenticated UserName}"  
        -P "{SQL Server Authenticated Password}"  
        -Q 'select * from [dbo].[Intelligent Cloud]'
```

- Firewall: allow client IP address
use Azure Management Portal,
or run `sp_set_firewall_rule` in the master database
- Allow remote access to the server
use SQL Server Management Studio,
or run `sp_configure 'remote access', 1;`

Cloud Migration Run


Azure Data Factory
Replication pipeline

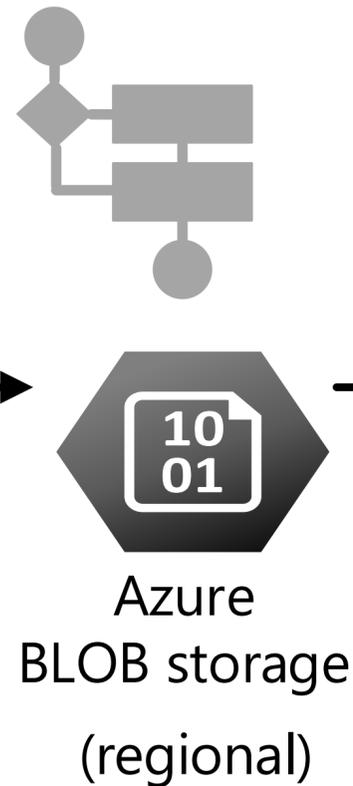


On-premise SQL DB

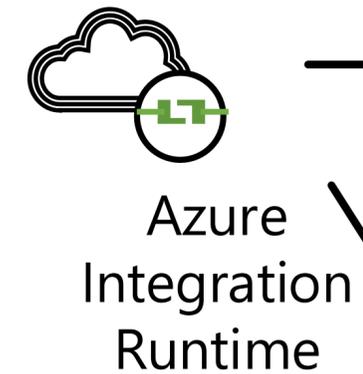


Self-hosted
Integration
Runtime

compress



decompress



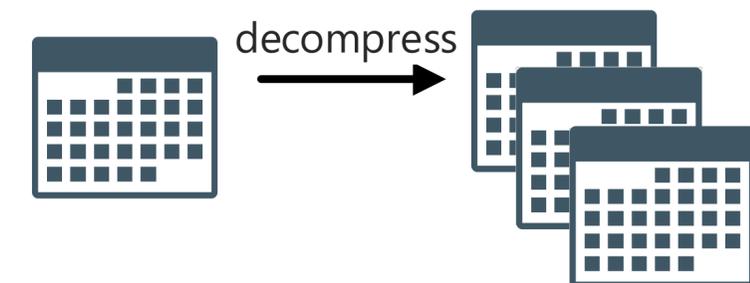
Business Central online

Azure SQL DB

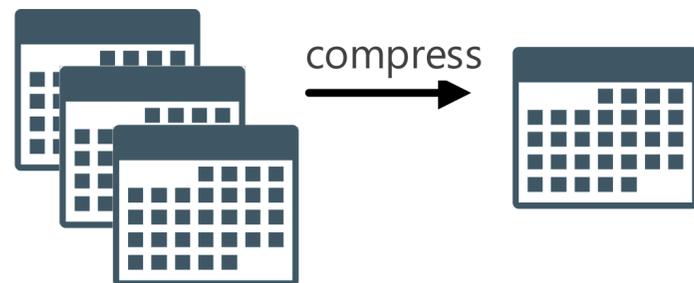
Change tracking
version #



decompress



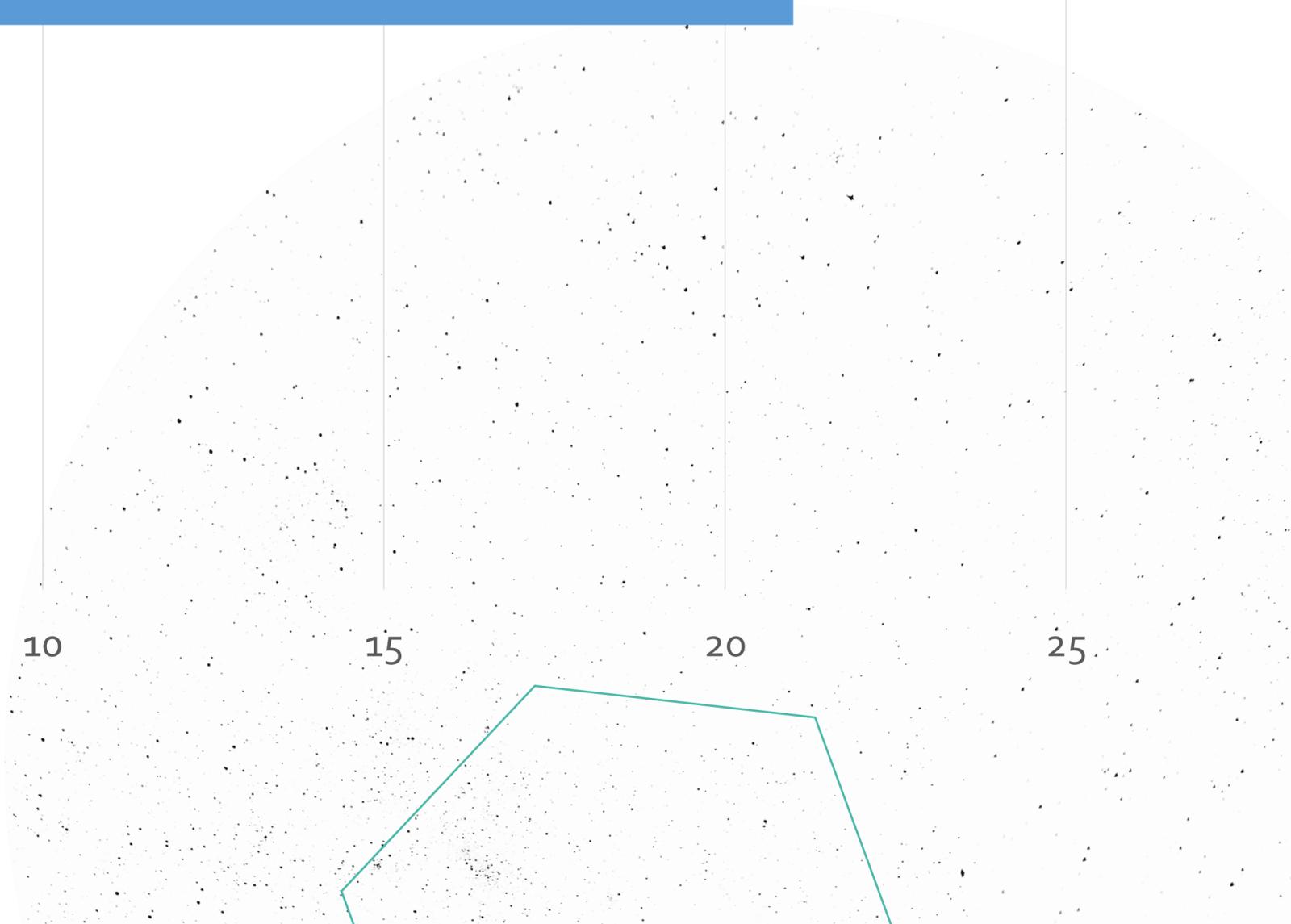
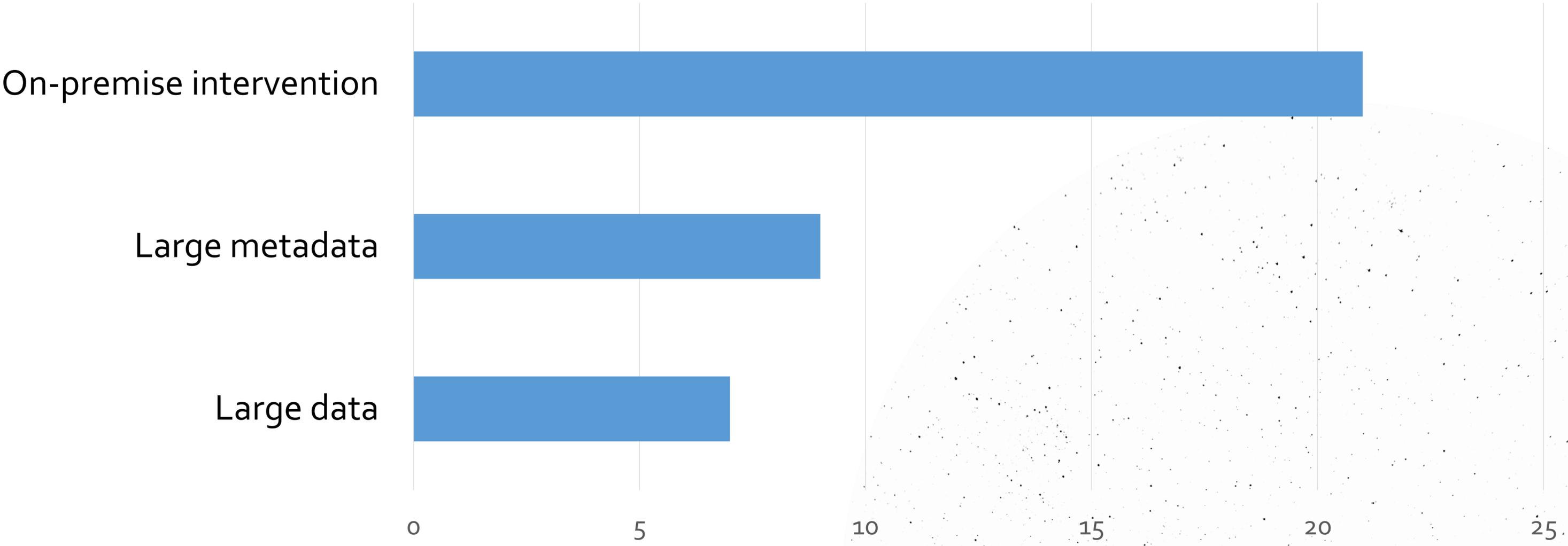
compress



Cloud Migration Run – common errors



Top 3 errors during Migration Runs (last 30 days)



Migration Runs – common errors

On-premise intervention

Typical error messages

- The Self-hosted Integration Runtime is offline.
- Message=A database operation failed with the following error: 'Invalid object name ... '
- Message=A database operation failed with the following error: 'Could not find stored procedure ' ... '

Mitigation

- Make sure that the machine hosting Integration Runtime stays online all the time.
- Shutting down the SHIR host temporarily can be used to cancel an ongoing migration run, but if the SHIR host stays offline for too long, all cloud migration infrastructure may be automatically cleaned up, making resuming migrations impossible.
- Make sure to wait before replacing the source database, or restoring it from a backup, until the migration run has completed.

Migration Runs – common errors

Large metadata

Typical error messages

- Message=The size of lookup activity result exceeds the limitation 4194304
- User's payload is too large..
ErrorCode: PayloadTooLarge.

Mitigation

- Reduce the number of companies to replicate in each batch by selecting fewer companies in Cloud Migration setup and using 'Select Companies To Migrate' page action
- Uninstall unnecessary extensions in the cloud environment.
- Exclude singular AL tables from migration by setting the table attribute in the application object:

```
ReplicateData = false;
```

Migration Runs – common errors

Large data during bulk copy

Typical error messages

- Message=Exception of type 'System.OutOfMemoryException' was thrown.
- Message=A task failed with out of memory.

Mitigation

- Out of memory usually happens for tables with large fields (e.g. images in Tenant Media table) when they are copied in a bulk.
Try to redirect such tables to full copy path instead.

Alter the on-premise stored procedure 'dbo.IsFullCopyTable' inserting a block like:

```
IF @SqlTableName = 'Tenant Media'  
BEGIN  
    SET @IsFullCopy = 1  
    RETURN  
END
```

Then trigger a new migration run.

Migration Runs – common errors

Large data during table-to-table full copy

Typical error message

- Message=The specified row delimiter is incorrect.
Cannot detect a row after parse
100 MB data.

Mitigation

- This error usually happens for large tables when they are copied table to table.
Try to redirect the failed tables to bulk copy path instead of full copy.

Alter the on-premise stored procedure 'dbo.IsFullCopyTable' inserting a block like:

```
IF @SqlTableName = '<failed SQL table name>'
BEGIN
    SET @IsFullCopy = 0
    RETURN
END
```

Then trigger a new migration run.

Performance tips for data replication

- For on-premise SQL Server - ensure that the Integration Runtime host machine meets the minimal requirements:
 - 2-GHz processor with 4 cores
 - 8 GB of RAM
 - 80 GB of available disk space
 - .NET Runtime v. 4.7.2
 - Should not sleep or hibernate
- For Azure SQL source - monitor CPU and memory utilization, and upscale the database in case of high consumption
- Update statistics and reorganize indexes for the source database
- Use a dedicated SQL Server with a copy of the source database
- Reduce the number of companies set up for migration

Table mapping during migration

Default mapping



Table 50002 MyTable

*All tables matching **by SQL name** are replicated automatically
(non-matching fields are skipped)*



Table 50033 MyTable

CRONUS International Ltd_ \$MyTable\$604e9013-1d05-40d5-af3f-5d6c6ea639ac

company name *table name* *extension ID*



Warnings are issued for cloud tables without on-premise match



Table Migration Status			
Search			
Company Name ↑	Table Name ↑	Status ↑ ▼	Message
CRONUS International Ltd.	MyCloudTable\$604e9013-1d05-40d5-af3f-5d...	Warning	The table does not exist in the local instance.



Table 50033 MyCloudTable

Table mapping during migration

Custom mapping

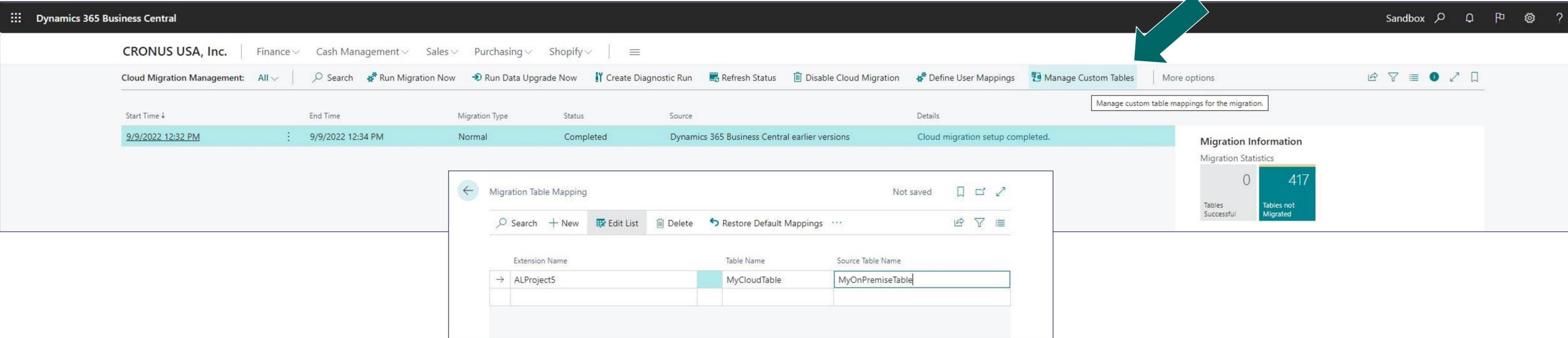


Table 50002 MyOnPremiseTable

Fields matching **by name** and compatible **by type** are replicated to the mapped cloud tables



Table 50033 MyCloudTable



The screenshot shows the Dynamics 365 Business Central interface. At the top, the navigation bar includes 'CRONUS USA, Inc.' and various functional areas like Finance, Cash Management, Sales, Purchasing, and Shopify. Below this, the 'Cloud Migration Management' section is active, displaying a table of migration runs. A specific migration run is highlighted with a teal background, showing a start time of 9/9/2022 12:32 PM, an end time of 9/9/2022 12:34 PM, a normal migration type, and a completed status. The source is identified as 'Dynamics 365 Business Central earlier versions' and the details state 'Cloud migration setup completed.' To the right of this table, a 'Migration Information' panel shows 'Migration Statistics' with 0 'Tables Successful' and 417 'Tables not Migrated'. A teal arrow points from the 'Manage Custom Tables' button in the top navigation bar to a pop-up window titled 'Migration Table Mapping'. This pop-up window contains a table with the following data:

Extension Name	Table Name	Source Table Name
→ ALProject5	MyCloudTable	MyOnPremiseTable

Part 3 – Data Upgrade

Step 1.
Upgrade to 14.x

Step 2.
Replicate data to SaaS

Step 3.
Run data upgrade in
SaaS

14.X

C/AL + AL

15.X

AL

16.X

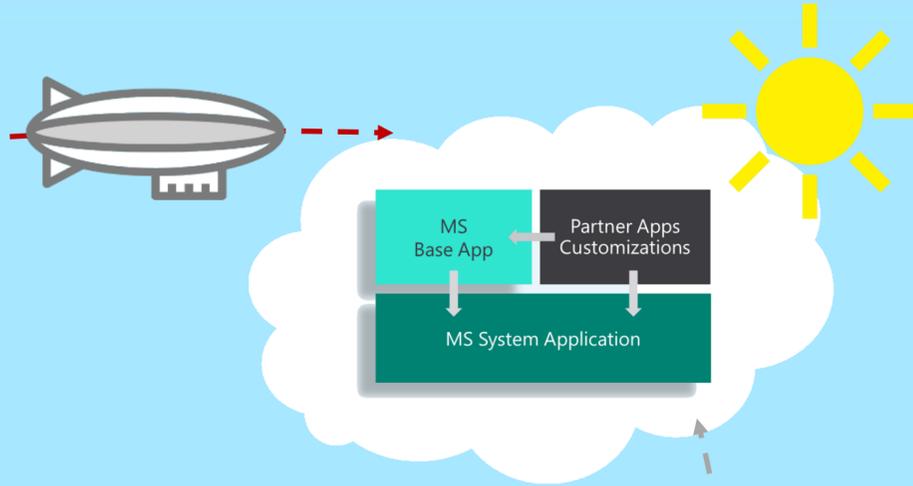
17.X

18.X

19.X

20.X

21.X



New flow for Upgrade

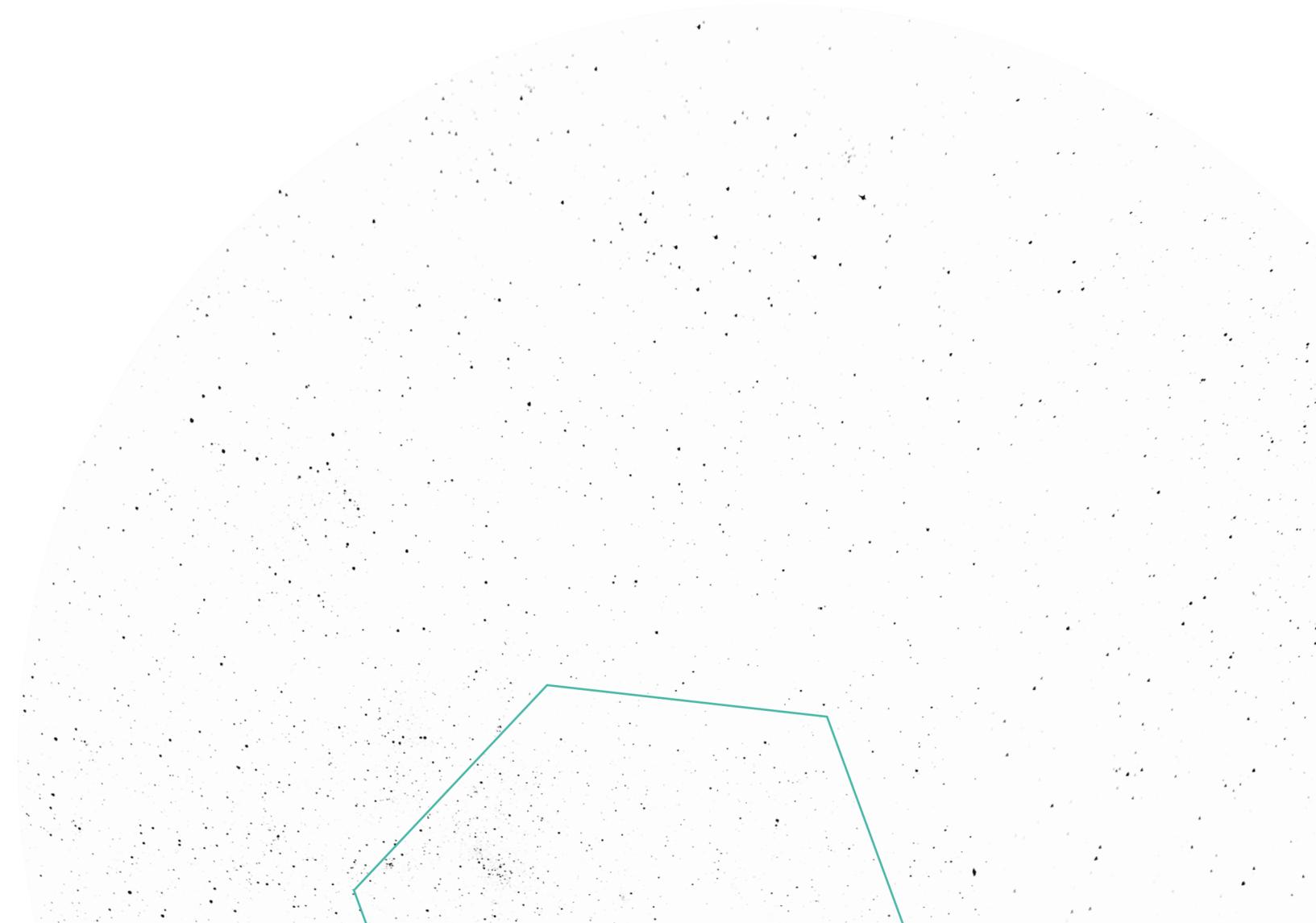
We are leveraging the logic for regular upgrade

New flow for Upgrade

Base App

Business Central
Cloud Migration
(Previous Release)

Upgrade code 20.0



New flow for Upgrade

Base App

Upgrade code 20.0

Business Central
Cloud Migration
(Previous Release)

Upgrade code 20.0

New flow for Upgrade

Base App

Upgrade code 20.0

Business Central
Cloud Migration
(Previous Release)

Cloud Migration
Upgrade code 20.0

New flow for Upgrade

Base App

Business Central
Cloud Migration
(Previous Release)

Partner App

Upgrade code 20.0

Cloud Migration
Upgrade code 20.0

Upgrade code 20.0

New flow for Upgrade

Base App

Business Central
Cloud Migration
(Previous Release)

Upgrade code 20.0

Cloud Migration
Upgrade code 20.0

Partner App

Partner App
Cloud Migration
code

Upgrade code 20.0

Cloud Migration
Upgrade code 20.0

New flow for Upgrade

Base App

Business Central
Cloud Migration
(Previous Release)

Partner App

Partner App
Cloud Migration
code

Upgrade code 20.0

Cloud Migration
Upgrade code 20.0

Upgrade code 20.0

Cloud Migration
Upgrade code 20.0

Upgrade code 21.0

Upgrade code 21.0



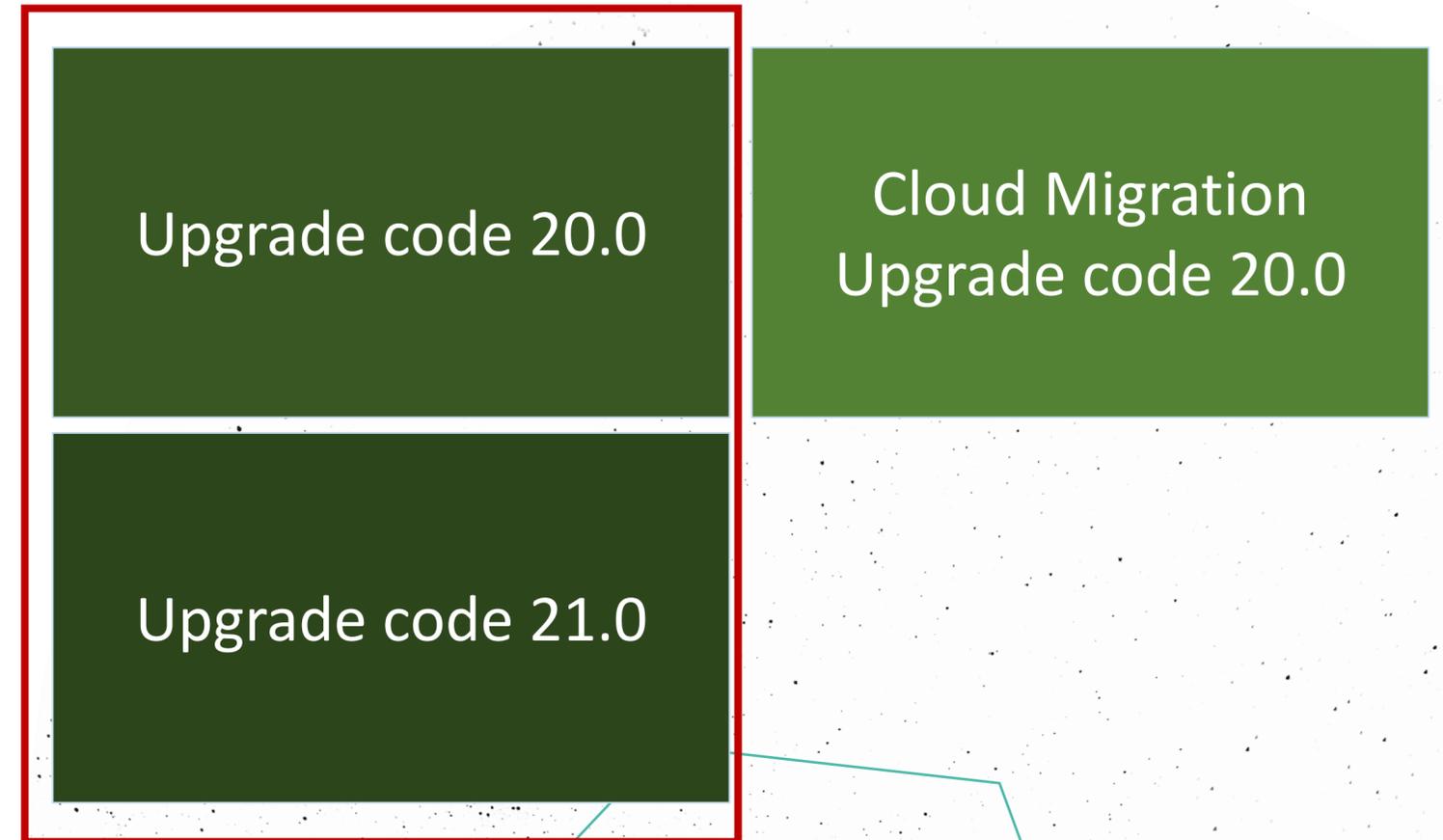
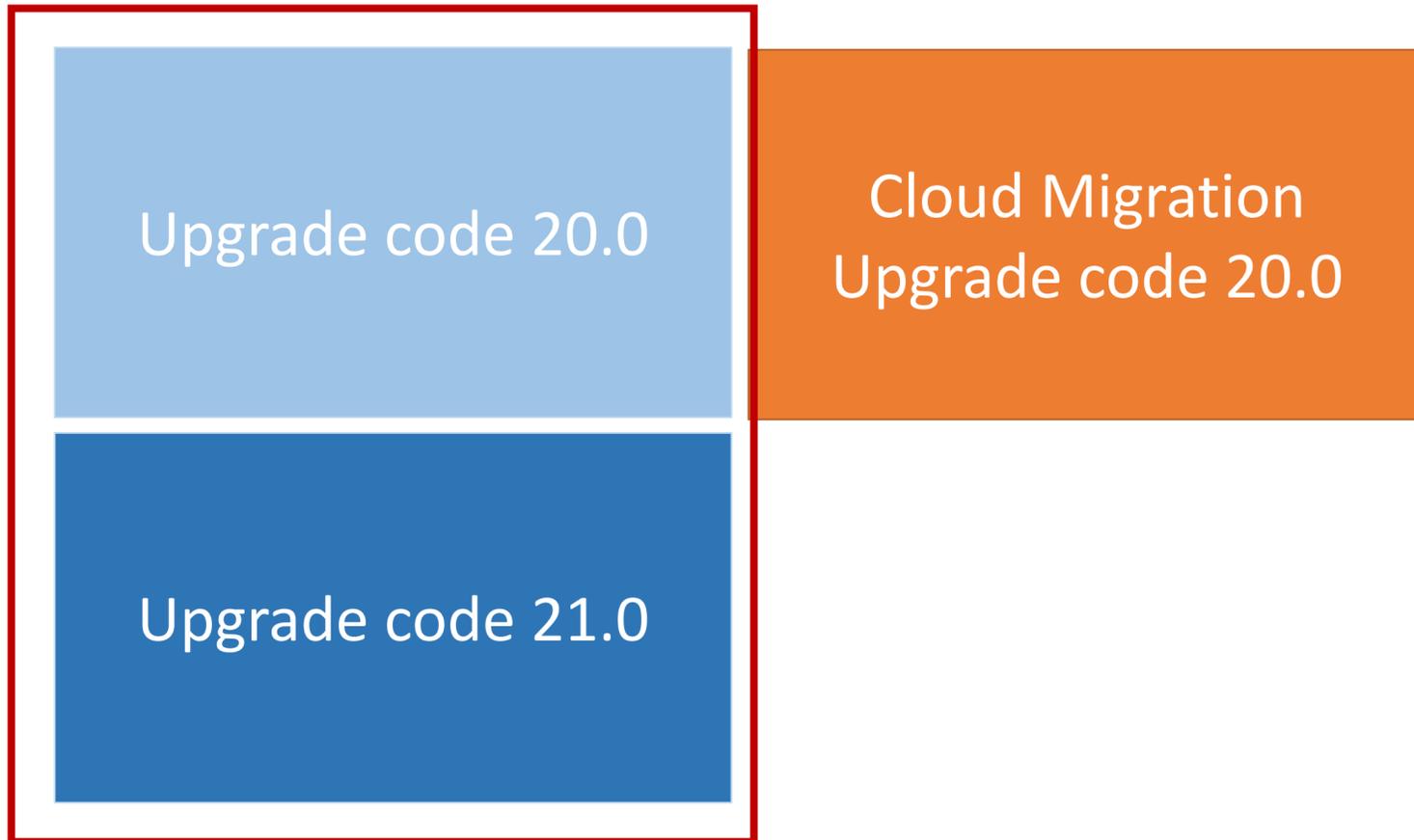
New flow for Upgrade

Base App

Business Central
Cloud Migration
(Previous Release)

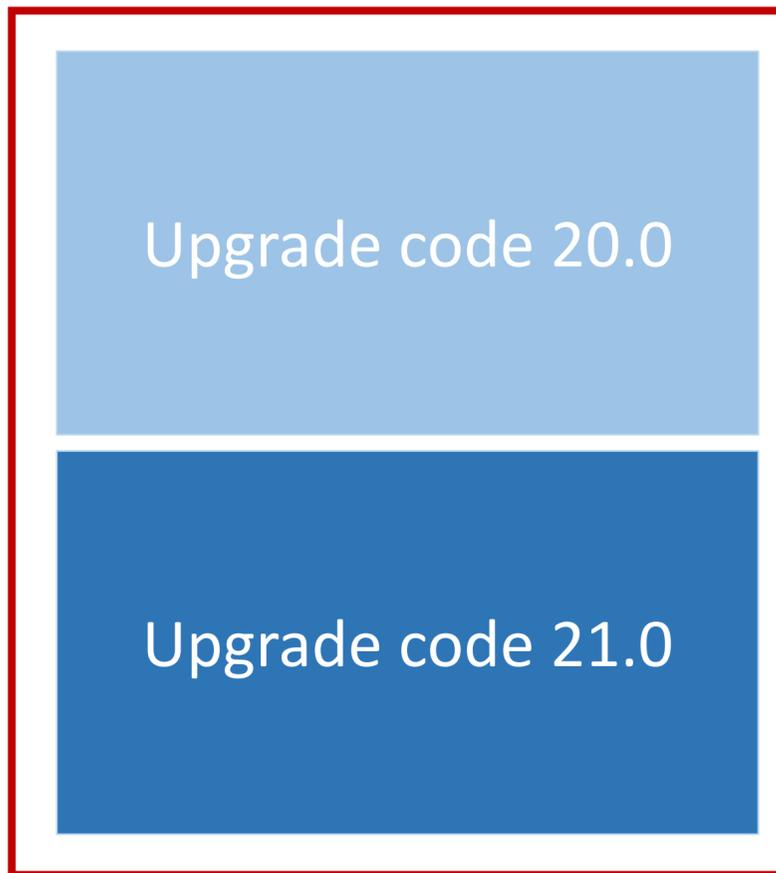
Partner App

Partner App
Cloud Migration
code

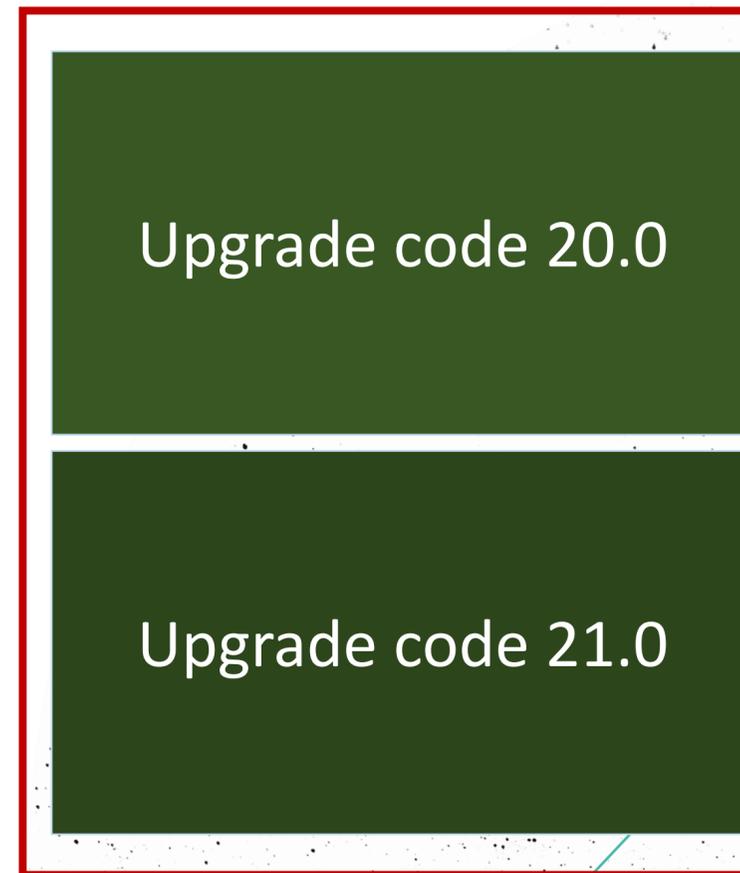


New flow for Upgrade

Base App



Partner App



Benefits

- All apps are included
- Single Upgrade Logic
- Tenant Status is moved to Update (No HF-es, Task Scheduler...)
- Reusing Upgrade Reporting
- Upgrade telemetry included
- If upgrade fails – automatic Point-in-Time restore

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New upgrade flow

New upgrade flow

Dynamics 365 Business Central

CRONUS USA, Inc. | Finance | Cash Management | Sales | Purchasing | Shopify

Cloud Migration Management: All | Search | Run Migration Now | Run Data Upgrade Now | Create Diagnostic Run | Refresh Status | Disable Cloud Migration

Start Time ↓	End Time	Migration Type	Status	Source	Details
9/7/2022 11:26 AM	9/7/2022 11:47 AM	Full	Upgrade Pending	Dynamics 365 Business Central earlier versions	-
9/7/2022 11:04 AM	9/7/2022 11:06 AM	Normal	Completed	Dynamics 365 Business Central earlier versions	Cloud migration setup completed.

Migration Information

Migration Statistics

773 Tables Successful	775 Tables not Migrated
--------------------------	----------------------------

Run Statistics

773 Tables Successful	0 Tables Failed
--------------------------	--------------------

0 Tables Remaining	338 Tables with Warnings
-----------------------	-----------------------------

Company Status

3 Not Initialized Companies

New upgrade flow

Dynamics 365 Business Central

CRONUS USA, Inc. | Finance | Cash Management | Sales | Purchasing | Shopify

Cloud Migration Management: All | Search | Run Migration Now | Run Data Upgrade Now | Create Diagnostic Run | Refresh Status | Disable Cloud Migration

Start Time ↓	End Time	Migration Type	Status	Source	Details
9/7/2022 11:26 AM	9/7/2022 11:47 AM	Full	Upgrade Pending	Dynamics 365 Business Central earlier versions	-
9/7/2022 11:04 AM	9/7/2022 11:06 AM	Normal	Completed	Dynamics 365 Business Central earlier versions	Cloud migration setup completed.

 Upgrade was successfully scheduled. You can track the status in the Tenant Admin Center under Operations tab.

Migration Information

Migration Statistics

773	775
Tables Successful	Tables not Migrated

Run Statistics

773	0
Tables Successful	Tables Failed

0	338
Tables Remaining	Tables with Warnings

Company Status

3
Not Initialized Companies

New upgrade flow



Business Central

Dynamics 365

Hang on while we make some updates!

TECHNICAL DETAILS

We are doing some routine maintenance to give you the latest updates and best experience. This can take several minutes, so please wait.

Date and Time: 2022-09-07 10:29:17Z

AAD tenant ID: f99be650-07ce-45df-a285-3afe69a953eb

New upgrade flow

Dynamics 365 Business Central admin center

Apps Sessions Database Support Update Settings Copy Restore Rename Delete Refresh

Environments

Notification Recipients

Telemetry

Reported Outages

Operations

Capacity

Environments > Production

Details				Active ⓘ
Name	Application Family	Country/region	Azure Region	
Production	Business Central	US	West Europe	
Type	Application Insights Connection String ⓘ	Security Group		
Production	Not Set (Define)	Not Set (Define)		
URL https://businesscentral.dynamics-tie.com/f99be650-07ce-45df-a285-3afe69a953eb/Production				

Version Management			
Application Version	Platform Version	Available Update Version	Update Scheduling Available ⓘ
22.0.46057.4587	99.99		
Update will start on or after	Update Window (UTC-06:00) ⓘ	Update Rollout State ⓘ	
	09:00 PM - 04:00 AM (Modify)		

New upgrade flow



Getting ready...

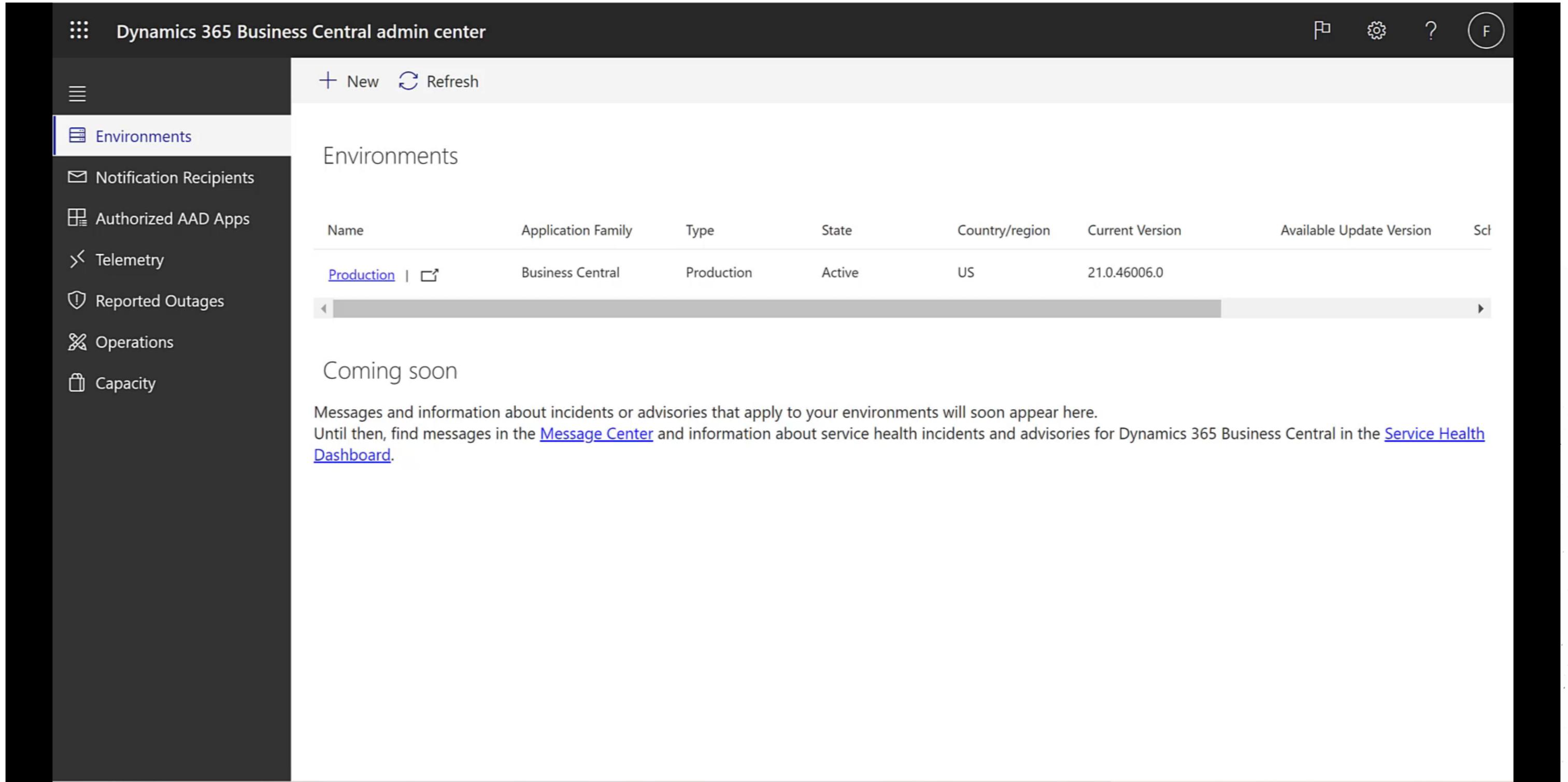


10 YEAR ANNIVERSARY
10 YEAR ANNIVERSARY



Upgrade Errors

Demo – Upgrade Errors



The screenshot shows the Dynamics 365 Business Central admin center interface. The left-hand navigation pane includes options for Environments, Notification Recipients, Authorized AAD Apps, Telemetry, Reported Outages, Operations, and Capacity. The main content area is titled 'Environments' and features a table with the following data:

Name	Application Family	Type	State	Country/region	Current Version	Available Update Version	Sci
Production 	Business Central	Production	Active	US	21.0.46006.0		

Below the table, there is a 'Coming soon' section with the following text:

Messages and information about incidents or advisories that apply to your environments will soon appear here. Until then, find messages in the [Message Center](#) and information about service health incidents and advisories for Dynamics 365 Business Central in the [Service Health Dashboard](#).

Demo – Upgrade Errors

Get started

Hi, meet Business Central!

You're all set to try out our demo company, Cronus. Go explore on your own, or take a quick tour first.

[Show demo tours](#)



Some features connect to other Microsoft services

Activities

Sales This Month \$1,906 > See more	Overdue Sales Invoice Amount \$63,890 > See more	Overdue Purch. Invoice Amount \$49,422 > See more	Sales Invoices Predicted Overdue 0 > See more
--	---	--	--

Ongoing Sales

Sales Quotes 2 >	Sales Orders 4 >	Sales Invoices 7 >
-------------------------------	-------------------------------	---------------------------------

Ongoing Purchases

Purchase Orders 5 >	Ongoing Purch. Invoices 3 >	Purch. Invoices Next Week 0 >
----------------------------------	--	--

Payments

Unprocessed Payments 1 >	Average Collection Days 5.8 >	Outstanding V. Invoices 13 >
---------------------------------------	--	---

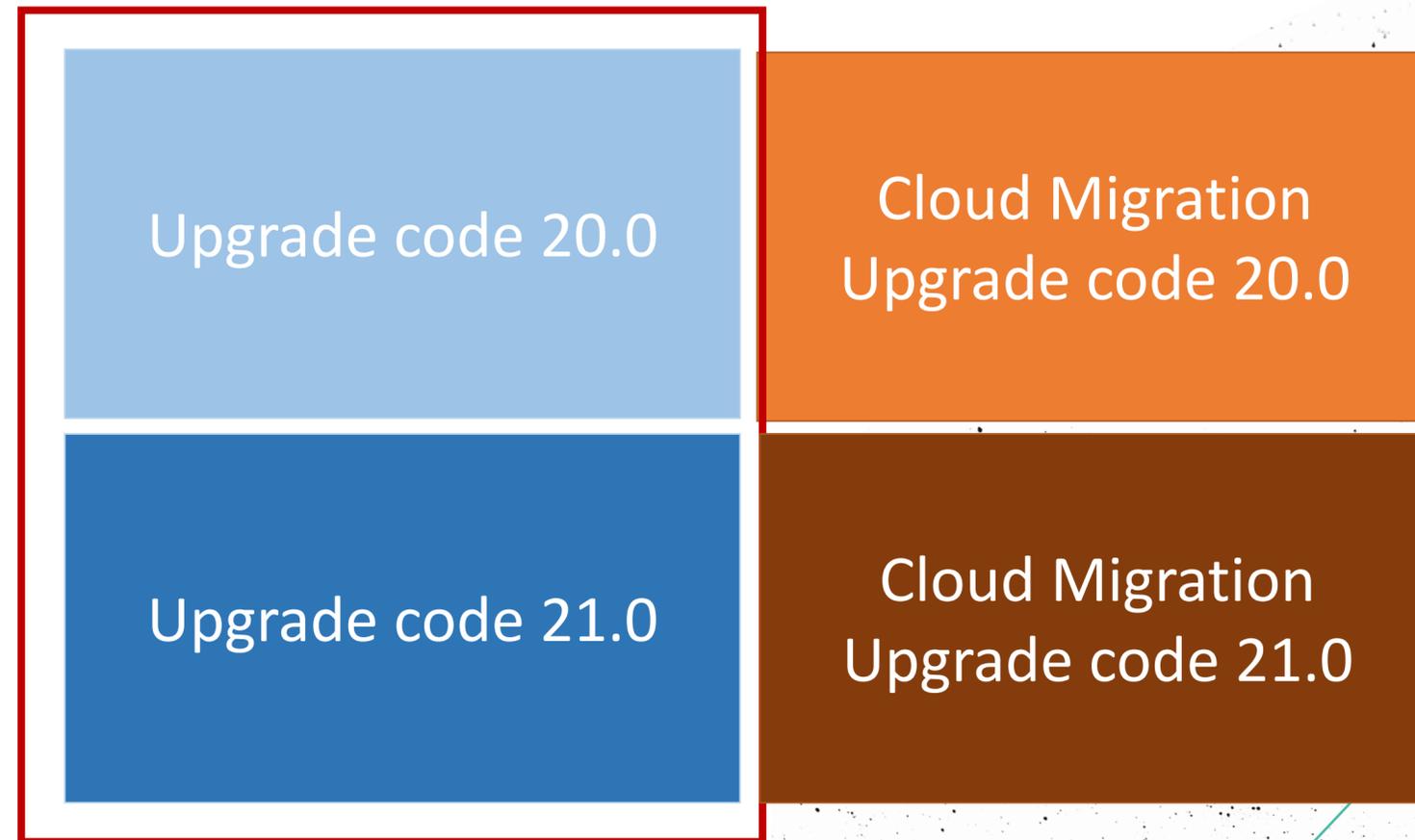
Scan documents


Create Incoming Invoices from Camera

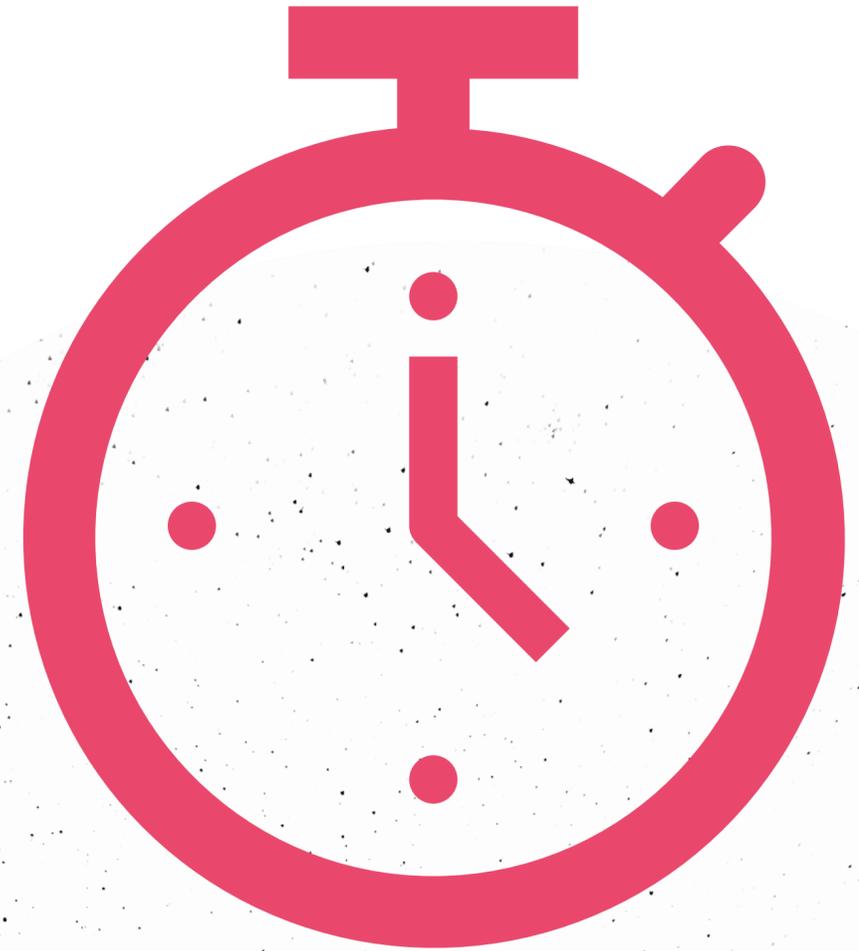
Old flow for Upgrade

Base App

Business Central
Cloud Migration
(Previous Release)



Faster upgrade



Data Transfer Feature

Example: Moving obsoleted fields the old way

```
CustLedgerEntry.SetLoadFields("Orig. Pmt. Disc. Possible(LCY)", "Org. Pmt. Disc. Possible (LCY)");  
CustLedgerEntry.SetFilter("Org. Pmt. Disc. Possible (LCY)", '<>%1', 0);  
CustLedgerEntry.SetRange("Orig. Pmt. Disc. Possible(LCY)", 0);  
  
if CustLedgerEntry.FindSet(true) then  
repeat  
    CustLedgerEntry."Orig. Pmt. Disc. Possible(LCY)" := CustLedgerEntry."Org. Pmt. Disc. Possible  
(LCY)";  
    CustLedgerEntry.Modify();  
until CustLedgerEntry.Next() = 0;
```

Existing approach 1 Million Entries

Between 2 to 24h+

Data Transfer Feature

Example:

Moving obsoleted fields, the new way

```
CustLedgerEntry.SetFilter("Orig. Pmt. Disc. Possible(LCY)", '<>%1', 0);  
if not CustLedgerEntry.IsEmpty() then  
    exit;
```

```
CustLedgerEntryDataTransfer.SetTables(Database::"Cust. Ledger Entry", Database::"Cust. Ledger Entry");  
CustLedgerEntryDataTransfer.AddSourceFilter(CustLedgerEntry.FieldNo("Org. Pmt. Disc. Possible (LCY)"),  
'<>%1', 0);  
CustLedgerEntryDataTransfer.AddFieldValue(CustLedgerEntry.FieldNo("Org. Pmt. Disc. Possible (LCY)"),  
CustLedgerEntry.FieldNo("Orig. Pmt. Disc. Possible(LCY)"));  
CustLedgerEntryDataTransfer.CopyFields();
```

Existing approach 1 Million Entries

Data Transfer 1 Million Entries

Between 2 to 24h+

~ 2-5 minutes

DataTransfer Feature - Limitations

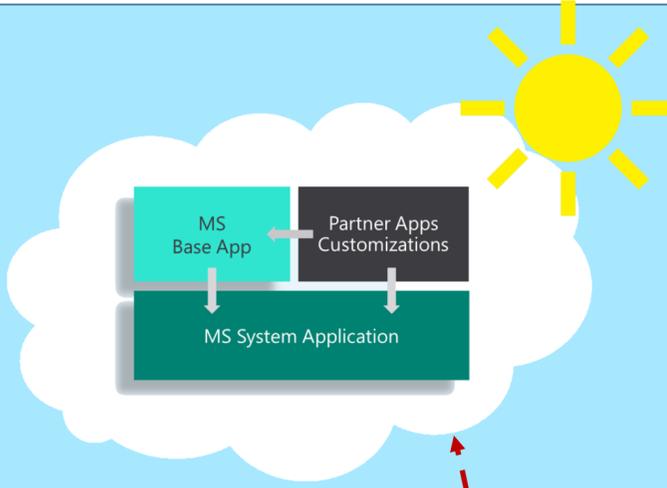
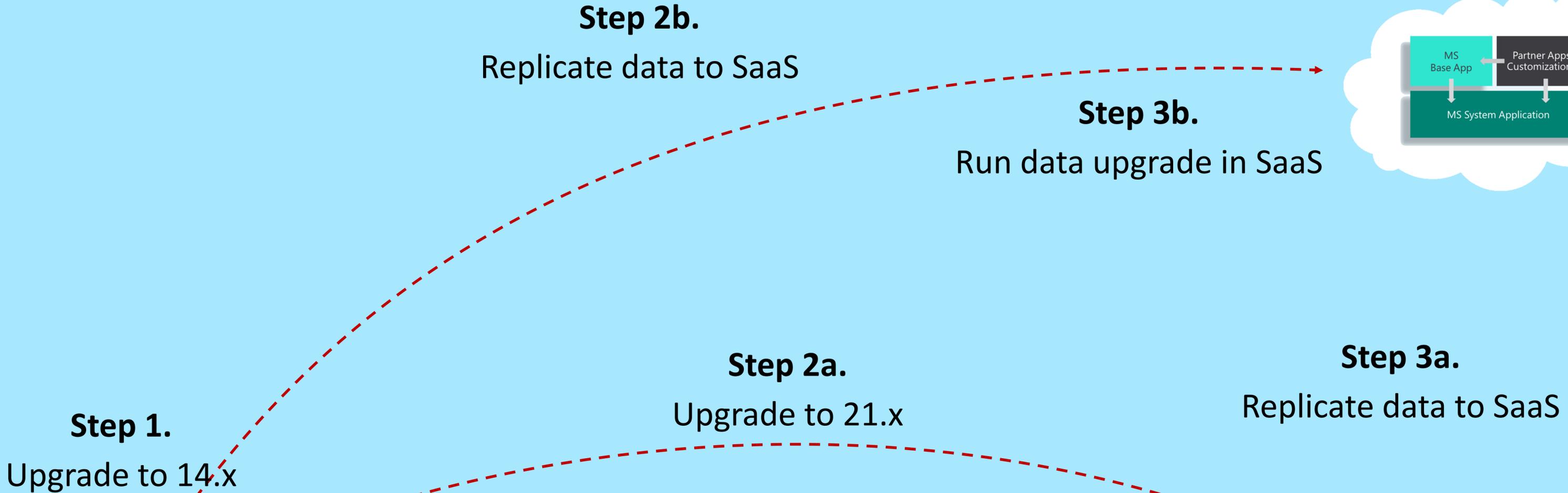
Can only be used in Upgrade scope to initialize new fields
Target OnPrem

Long running upgrade methods in v21?

Long running upgrade methods := -11;

Optimized 11 long running upgrade methods

Journey to Cloud



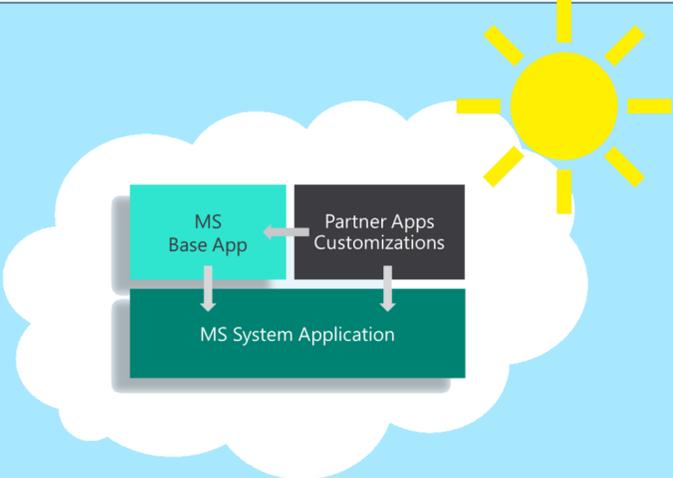
C/AL + AL

AL

Journey to Cloud

Step 2b.
Replicate data to SaaS

Step 3b.
Run data upgrade in SaaS

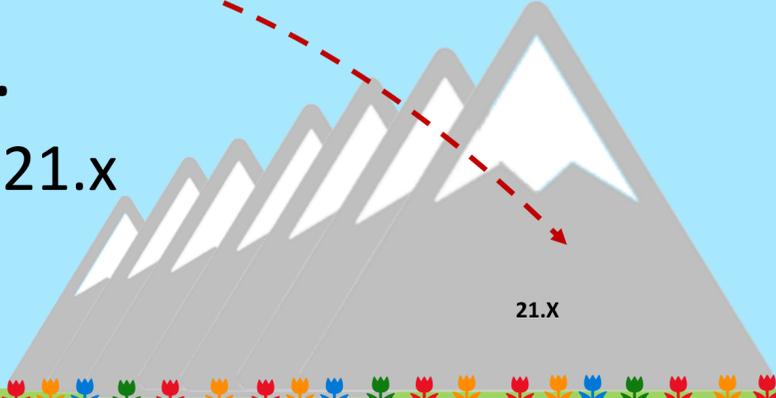


Step 1.
Upgrade to 14.x

Step 2a.
Upgrade to 21.x



C/AL + AL



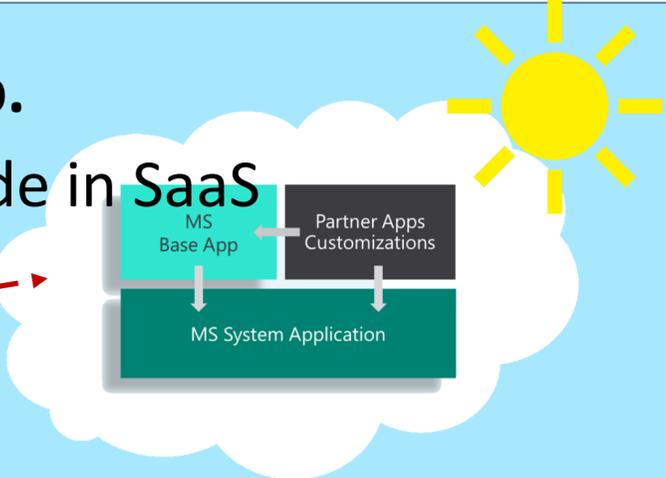
AL



Journey to Cloud

Step 2b.
Replicate data to SaaS

Step 3b.
Run data upgrade in SaaS

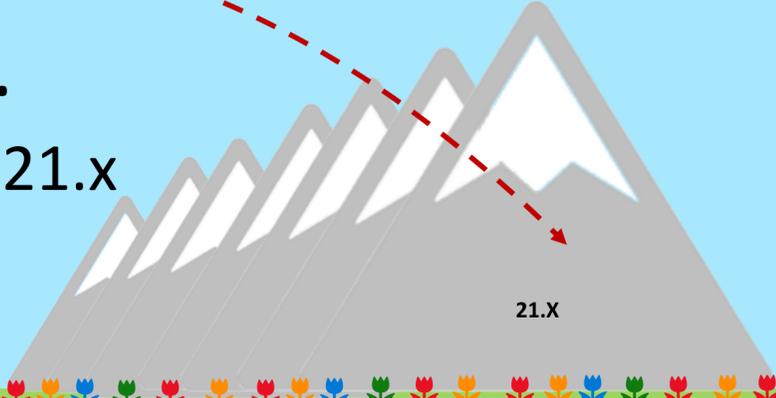


Step 1.
Upgrade to 14.x

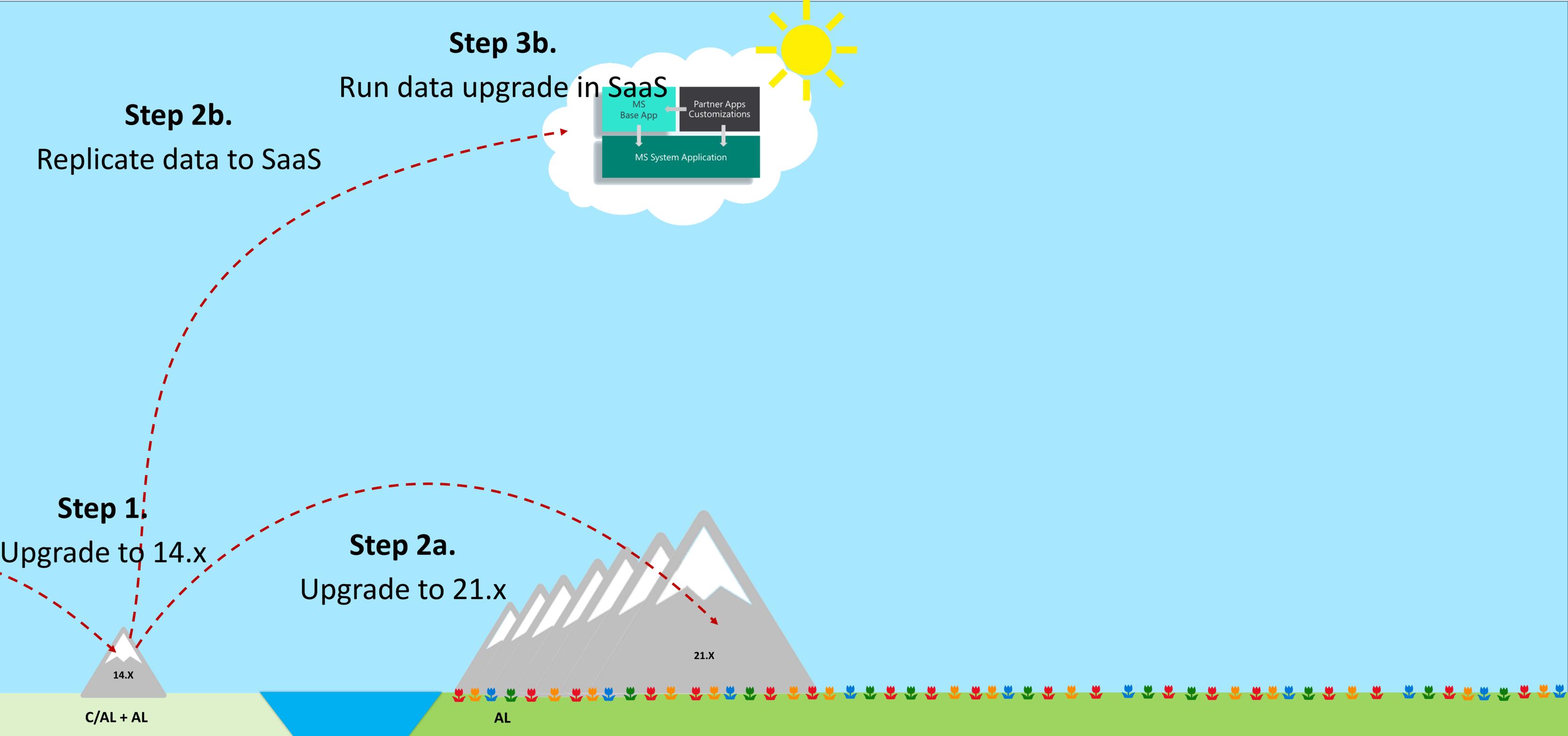


C/AL + AL

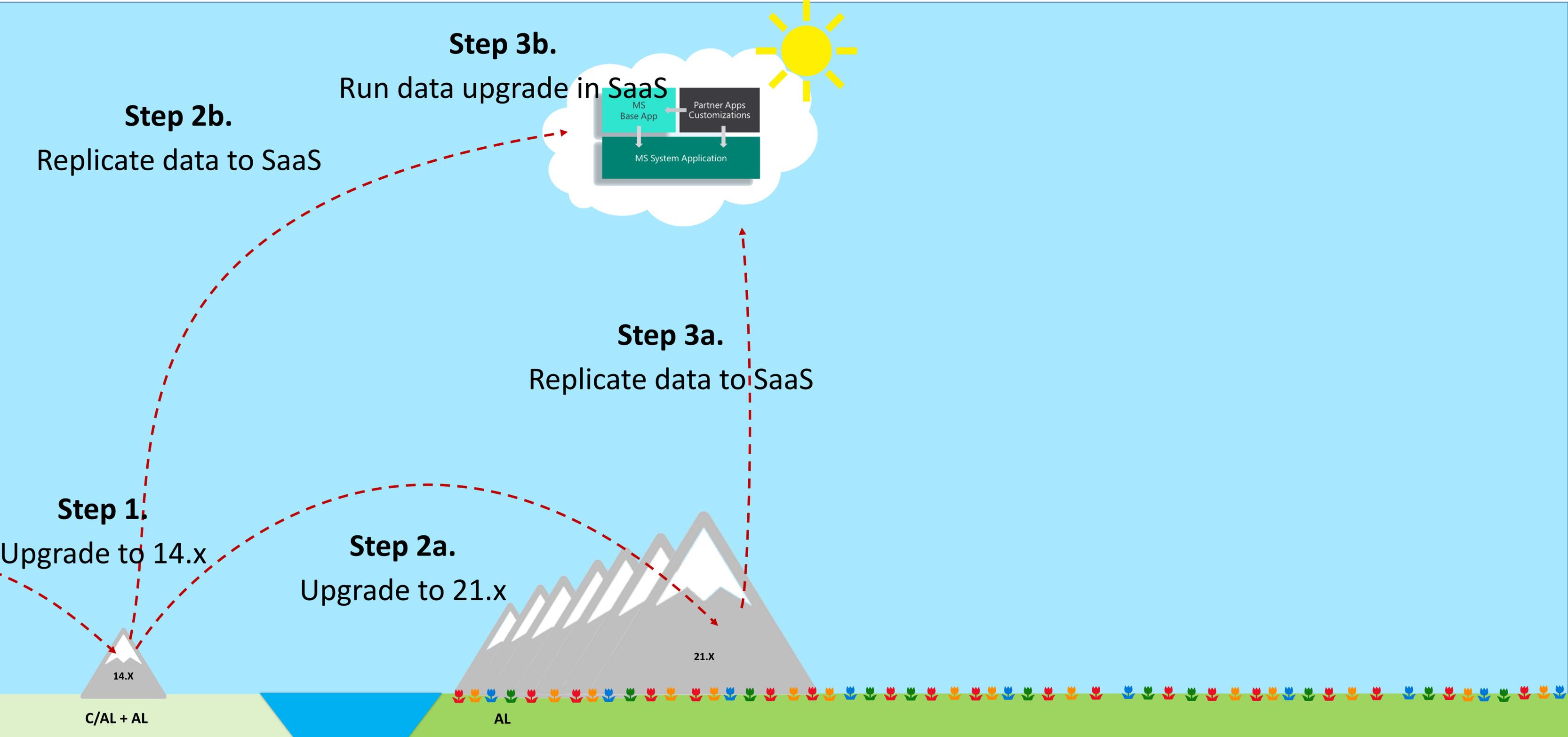
Step 2a.
Upgrade to 21.x



AL



Journey to Cloud



API for managing Cloud Migration E2E

Setup APIs:

- Setup Cloud Migration (Wizard)
- Company management - choose and create On-Prem companies
- Define table mappings for custom tables

Migration management:

- Replicate data
- Track progress – replicated, pending, failed tables
- Start upgrade
- Disable cloud migration

```
45 function Run-CloudMigrationE2E
46 (
47     [string] $UserName = $script:CurrentUserName,
48     [string] $Password = $script:CurrentPassword,
49     [ValidateSet("DynamicsBCLast","DynamicsBC","DynamicsGP")]
50     [string] $ProductId = "DynamicsBCLast",
51     [ValidateSet("SQLServer","AzureSQL")]
52     [string] $SqlServerType = 'SQLServer',
53     [switch] $SkipSetup,
54     [switch] $SetupAutomatically,
55     [string] $SqlConnectionString,
56     [System.Collections.ArrayList] $ExcludedCompanies = [System.Collections.ArrayList]::new(),
57     [string] $Version = "v1.0"
58 )
```



- Home, Mail, Notifications, Search
- DYNAMICS 365 BUSINESS CENT... +
- Test ToolKit
- Migrations
- MVPs 2
- App Development 20+
- AppSource 20+
- App Community

Migrations

This group is for questions and information regarding managing migrations to Bu. ✓ Joined

NEW CONVERSATIONS ALL CONVERSATIONS FILES SEARCH

Update Question Poll Praise Announcement

Share something with this group...

MEMBERS (870)

INFO Edit

Join us on Yammer

<https://aka.ms/BCCloudMigrationYammer>



Any Questions?

Thank

You!