



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

Performance DNA Knowledge Base Articles

Performance DNA 9.0

12/29/2021

Table of Contents

Performance DNA Knowledge Base Articles	3
Incorrect Characters when Opening Unicode CSV Files in Microsoft Excel	4
Required changes to api.config in order to work through a proxy	5
Making Exchange-based Rooms visible to Performance DNA	6
Crystal Report Default Value Records	10
Updates to Microsoft Framework 4.6 may break Crystal Reports	12
OrgData Setup	13
Lost lead zeros when importing OrgData	14
Teleopti OrgData Tips	15
Nice IEX OrgData Tips	17
Changing Service Account Password	19
DNA Connection error when upgrading to 9.0.x	21

Performance DNA Knowledge Base Articles

This manual contains the following Performance DNA knowledge base articles for Version 9.0.

- [Incorrect Characters when Opening Unicode CSV Files in Microsoft Excel](#)
- [Making Exchange-based rooms visible to Performance DNA](#)
- [Crystal Report Default Value Records](#)
- [Updates to Microsoft Framework 4.6 may break Crystal Reports](#)
- [OrgData Setup](#)
- [Lost lead zeros when importing OrgData](#)
- [Teleopti OrgData Tips](#)
- [Nice IEX OrgData Tips](#)
- [Changing Service Account Password](#)
- [DNA error when upgrading to 9.0](#)

Incorrect Characters when Opening Unicode CSV Files in Microsoft Excel

Software product name	PerformanceDNA
Version Number	8.5.x and below
Subject	You Encounter Incorrect Characters when Opening Unicode CSV Files in Microsoft Excel

Symptoms

You are using Microsoft Excel to view or analyse data that has been exported from Performance DNA as a CSV file, and your data contains Unicode characters (for example non English characters). The characters appear corrupted or incorrectly when viewed in Excel

Resolution

The issue occurs because Microsoft Excel reads CVS files in non-unicode character sets by default. To prevent this, you should import the file into Excel, rather than directly opening the file.

1. In Excel, click the Data tab, and in the 'Get External Data' ribbon/panel, click 'From Text'.
2. In the Import Text File dialog box, select Text Files (*.prn;*.txt;*.csv) as the file type, browse to the location where you exported/downloaded the CSV file, and then click Open (or Import).
3. In the Text Import Wizard - Step 1 of 3 dialog box, select Delimited, and from the File origin drop-down list, select 65001: Unicode (UTF-8) (or the appropriate language character identifier for your particular environment). In the Preview box below, make sure that your unicode text displays properly, and then click Next.
4. On Step 2 of 3, in the Delimiters section, make sure that only Comma is checked, and then click Finish
5. Finally, select New or Existing worksheet as required, and then click OK

Required changes to api.config in order to work through a proxy

Software product name	PerformanceDNA
Version Number	8.5.x and below

Symptoms

Your company are using a proxy to connect to a hosted version of Training Manager and it won't connect.

Resolution

If you go to the install directory .\Training Manager and find the api.config (the location of the api.config may be different depending on the install location. Copy the following:

```
<system.net>
  <defaultProxy enabled="true" useDefaultCredentials="true">
  </defaultProxy>
</system.net>
```

At the bottom of the file, inside the </configuration> tag in the SkillsPlanner.exe.config file

Making Exchange-based Rooms visible to Performance DNA

Software product name	Performance DNA
SLS Version Number	9.0
Subject	Making Exchange-based rooms visible to Performance DNA

Symptoms

You have configured Performance DNA for use with Exchange, but no **Rooms** are appearing.

Resolution

Start a Windows PowerShell session and use the following commands to create and maintain a **Room List** within the Exchange.

Setting up a PowerShell session with access to the Exchange Server

Use the following command to setup a PowerShell session with access to the exchange server.

```
$UserCredential = Get-Credential
$Session = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri
https://outlook.office365.com/powershell-liveid/ -Credential $UserCredential -Authentication
Basic -AllowRedirection
Import-PSSession $Session
```

Creating and updating Room Lists

You can create the **Room Lists** by using the **Exchange Online PowerShell cmdlet** `New-DistributionGroup` and the `RoomList` parameter as shown below. That is, you must change the `ExampleRoomList` and `testroom` options to match the **Room List** and **Room Names** for your environment.

```
New-DistributionGroup -RoomList -Name 'ExampleRoomList' -Members
('testroom1','testroom2','testroom3')
```

Displaying all the Rooms in the List

Use the following command to display all the **Rooms** in the **List**:

```
Get-DistributionGroupMember 'ExampleRoomList'
```

Adding a Room to the Room List

Use the following command to add a **Room** to the **Room List**:

```
Add-DistributionGroupMember -Identity 'ExampleRoomList' -Member 'testroom4'
```

Removing a Room from the Room List

Use the following command to remove a **Room** from the **Room List**:

```
Remove-DistributionGroupMember -Identity 'ExampleRoomList' -Member 'testroom3'
```

Removing the Room List

Use the following command to remove a **Room List**:

```
Remove-DistributionGroup 'ExampleRoomList'
```

Permissions required for the user accessing Exchange Server

Owner Permission

The user that you are using to access Exchange Server from within Performance DNA must have **Owner** permissions on the **Calendar** folder of each **Room** that you want to use. If the user doesn't have the required permissions, the connectivity test will pass but Performance DNA will not create entries in the **Room Calendars**.

In such cases, your log file shows error as shown in the following example:

```
04/10/2018 13:32:06 - ERROR - An exception of type
Microsoft.Exchange.WebServices.Data.ServiceResponseException was caught
04/10/2018 13:32:06 - ERROR - The specified folder could not be found in the store.
04/10/2018 13:32:06 - WARN - at
Microsoft.Exchange.WebServices.Data.ServiceResponse.InternalThrowIfNecessary()
    at Microsoft.Exchange.WebServices.Data.MultiResponseServiceRequest`1.Execute()
...
```

Checking Permissions

You can check the current permissions for a **Room Calendar** by using the Get-MailboxFolderPermission cmdlet, by passing the email address of the **Room**, followed immediately by a colon, backslash, and the word Calendar. For example, consider that you want the user with email id **pdnroomuser@yourexchange.com** to have access to your **Rooms**. Using the **Room's**

email id **roomname@yourexchange.com**, you can check the permissions by executing the following command:

```
Get-MailboxFolderPermission roomname@yourexchange.com:\Calendar
```

The command result gives you the details of permissions that a user/group have on a **Room's Calendar**:

FolderName	User	AccessRights	SharingPermissionFlags
Calendar	Default	{AvailabilityOnly}	
Calendar	Anonymous	{None}	

Granting Owner Permissions to the Room User

In the example above, the room user doesn't have any permission. To add a permission, use the Add-MailboxFolderPermission cmdlet with other details as shown below:

```
Add-MailboxFolderPermission roomname@yourexchange.com:\Calendar -User  
pdnroomuser@yourexchange.com -AccessRights Owner
```

This would give you an output similar to the following:

FolderName	User	AccessRights	SharingPermissionFlags
Calendar	PDNA Room User	{Owner}	

Updating Room User Permissions to the Owner

If the user already has permissions to the **Room Calendar**, but NOT the Owner permissions, use the Set-MailboxFolderPermission cmdlet to update the permission.

For example, the user has following permissions for the **Room**.

FolderName	User	AccessRights	SharingPermissionFlags
Calendar	Default	{AvailabilityOnly}	
Calendar	Anonymous	{None}	
Calendar	PDNA Room User	{Reviewer}	

You can update the permissions by using the following command:

```
Set-MailboxFolderPermission roomname@yourexchange.com:\Calendar -User  
pdnroomuser@yourexchange.com -AccessRights Owner
```

Disconnecting PowerShell from the Exchange

After completing your tasks in the PowerShell session, disconnect it from the Exchange session by

running the following command:

```
Get-PSSession | Where-Object {$_.ComputerName -eq "outlook.office365.com"} | Remove-PSSession
```

Important

Genesys recommends the above scripts. However, you can change them or write an alternative script that comply with your organization's local security policy.

Crystal Report Default Value Records

Software product name	Performance DNA
Version Number	8.5.x and below
Subject	Crystal Report Default Value Records

Symptoms

Crystal reports sets a default value for the number of records being returned to 1000, As such this means that you are only able to report on the 1st 1000 users entered into database. Reports won't show any further users.

Resolution

To increase the maximum number of values for a dynamic parameter list of values, set the registry key: MaxRowsetRecords, to a value greater than 1,000:

Open the Microsoft Registry Editor, and navigate to the path corresponding to the version of Crystal Reports used:

Crystal Reports 2008:

HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 12.0\Crystal Reports\DatabaseOptions\LOV

Crystal Reports 2011:

HKEY_LOCAL_MACHINE\SOFTWARE\SAP BusinessObjects\Suite XI 4.0\Crystal Reports\DatabaseOptions\LOV

Crystal Reports 2013:

HKEY_LOCAL_MACHINE\SOFTWARE\SAP BusinessObjects\Suite XI 4.0\Crystal Reports\DatabaseOptions\LOV

Crystal Reports 2016:

HKEY_LOCAL_MACHINE\SOFTWARE\SAP BusinessObjects\Suite XI 4.0\Crystal Reports\DatabaseOptions\LOV

Crystal Reports for Visual Studio 2010:

HKEY_LOCAL_MACHINE\SOFTWARE\SAP BusinessObjects\Crystal Reports for .NET Framework 4.0\
Crystal Reports\DatabaseOptions\LOV

Notes

Add the key: LOV, if it is not present. For 64-bit version of Microsoft Windows, the registry path will be slightly different, it will start with: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\

But the rest of the registry path is the same.

Add the String value: **MaxRowsetRecords**

Set the value of: **MaxRowsetRecords** to the maximum number of records in the table where the values are stored. If Crystal Reports application needs to scan 100 000 records to retrieve 20 000 parameter values, set the value to 100 000.

Updates to Microsoft Framework 4.6 may break Crystal Reports

Software product name	Performance DNA
SLS Version Number	9.0
Subject	Updates to Microsoft Framework 4.6 may break Crystal Reports

Symptoms

Crystal Reports have been working on your installation, and then suddenly stop. You are unable to expand the Report Viewer tree view to access the reports.

Cause:

This issue is caused when the .Net Framework 4.6 is updated and its version number increases. The Crystal reports viewer is unable to find some files that it needs and therefore fails. (See [\[1\]](#))

Resolution

SAP have indicated that they will release a fix for this problem in their Service Pack 16. Until that is released, there are two approaches you can take:

1. Disable .Net Framework updates on the server
2. Update the version number of the folder containing the files for Crystal reports to match the new version number of the .Net Framework. You will need to do this every time an update is installed.

OrgData Setup

Software product name	Performance DNA
SLS Version Number	8.5.x and below
Subject	OrgData Setup

The aim of this document is to help complete and c during an install/upgrade.

Install/Configuration Steps

Customer provides a list of the fields that they have in WFM plus an indication of what they want.

Examples when working Genesys:

WfmID, Firstname, Lastname, EmploymentID, PositionName, PositionID, LMPositionID, Site, Team, Email

Examples when working Teleopti:

WfmID, Firstname, Lastname, EmploymentID, PositionName, PositionID, LMPositionID, Site, Team, Email, Optional column(s)

Lost lead zeros when importing OrgData

Software product name	PerformanceDNA
Version Number	8.5.x and Below
Subject	Lost lead zeros when importing OrgData

Symptoms

You are using the OrgData process to import user data and build a reporting hierarchy and find that data with a leading 0 (zero) is missing the 0(s). When checking the OrgData process the data is correct in the Staging table however it is incorrect in the OrgData table and Users data within the product.

Resolution

The issue is caused by SQL server converting each value in to the most suitable data type based on the value's content. This results in numbers with leading 0s being treated as a number and the leading 0s are stripped meaning 000023 becomes 23. There are 2 possible solutions to overcome this issue:

- Add a post import SQL script to the OrgData xml config to manually copy the data from Staging to OrgData referencing all of the columns. The resulting Import Sources configuration would look similar to the following example:

```
<ImportSources CsvFilePath="C:\Genesys\Applications\OrgData\CurrentData"
BackupFilePath="C:\Genesys\Applications\OrgData\BackedUpData"
PostImportSql="TRUNCATE Orgdata INSERT INTO Orgdata (Id, EmployeeID, FirstName, LastName,
PositionID, PositionName, LMPositionID, CacheData, WfmUserId,
PortalEmplId,
Site,TeamManagerID) Select Id, EmployeeID, FirstName,
LastName,
PositionID,
PositionName, LMPositionID, CacheData, WfmUserId,
PortalEmplId,
Site,TeamManagerID
FROM Staging">
```

- Alternatively, similar SQL or an UPDATE query can be added to the end of the existing Post Import SQL or Stored Procedure to repopulate the data with the correct formatting.

Teleopti OrgData Tips

Software product name	Performance DNA
Version Number	9.0
Subject	Teleopti OrgData Tips

Symptoms

- WFM users not being imported by OrgData.
- Agents not being Placed under their Manager in the User Hierarchy
- User data missing from import

Resolution

WFM users not being imported by OrgData

In order for OrgData to pull user data from Teleopti WFM the User must be in a **Site and Team**. Due to the API calls OrgData can only request User data based on Site and Team assignment.

Agents not being Placed under their Manager in the User Hierarchy

There are 3 possible causes of User Hierarchy not being built correctly:

1. The LMPositionID field in OrgData is not mapped to the WFM User field that contains the Agent's Manager's Employee ID.
2. The PositionID field in OrgData is not mapped to the Employee ID field from WFM.
3. WFM has not had the Manager's Employee ID entered against the Agent in the correct Optional Column.

User data missing from import

The most common cause for missing data is a mismatch in the mapping of the OrgData fields with WFM. Most issues can be resolved by checking the field/column names in the OrgData Config XML for spelling and formatting errors such as:

- "EmployeID" rather than "EmployeeID"
- "LeadEmploymentID" rather than "Lead Employment ID"

When mapping OrgData fields to WFM User data fields the field/column names must

match exactly. Some WFM Optional Columns may contain spaces or special characters.

General Tips

- Employee ID is mandatory and must be unique, if duplicates are found the OrgData process will stop and the import will fail.
- Optional Columns can often have a rouge <space> at the beginning or end of the name causing a mapping mismatch.
- When creating the Import Template the field that maps to LoginID must contain unique values. Duplicates will cause the push of data to Competence Manager (Performance DNA) to fail.

Sample OrgData Config file Mapping

```
<ImportSources
CsvFilePath=""
BackupFilePath=""
PostImportSql="">
  <Source Type="Wfm" ID="1" MergeMethod="Append">
    <Mapping Field="Username" WfmField="EmployeeId" />
    <Mapping Field="EmployeeID" WfmField="EmployeeId" IsKey="true" />
    <Mapping Field="PositionID" WfmField="EmployeeId"/>
    <Mapping Field="WfmUserId" WfmField="UserId" />
    <Mapping Field="FirstName" WfmField="FirstName" />
    <Mapping Field="LastName" WfmField="LastName" />
    <Mapping Field="Email" WfmField="Email" />
    <Mapping Field="LMPositionID" WfmField="Team Manager ID" />
    <Mapping Field="Site" WfmField="Site" />
    <Mapping Field="Team" WfmField="Team" />
    <Mapping Field="TrainingPlannerRole" WfmField="Training Planner Role" />
  </Source>
</ImportSources>
```


Nice IEX OrgData Tips

Software product name	Skills Mangement
Version Number	8.5.x and Above
Subject	Nice IEX OrgData Tips

Symptoms

- WFM users not being imported by OrgData.
- Agents not being Placed under their Manager in the User Hierarchy
- User data missing from import

Resolution

WFM users not being imported by OrgData

In order for OrgData to pull user data from NICE IEX WFM the User must have the following Agent Data Groups (ADGs) or Agent Data Values (ADV's) if these are missing or not unique OrgData may see the User as invalid and remove them from the import:

- Skills Manager Role
 - This is a custom ADG that is used to identify Users that are Trainers, Managers or Agents
- Managers ID
 - This ADG is used to store the User's Line Manager's Employee ID. We use this to map Users to their Manager when creating the reporting hierarchy.
- EmployeeID
 - This should be populated and unique as it is typically used as a key field when mapping Users within the system.
- MU Name
 - MU Name can be collated as a standard OrgData field. This can be very useful when filtering the Users to be imported as custom scripts can be used to remove specific MU's from the import data.

Agents not being Placed under their Manager in the User Hierarchy

There are 3 possible causes of User Hierarchy not being built correctly:

1. The LMPositionID field in OrgData is not mapped to the WFM User field that contains the Agent's Manager's Employee ID.
2. The PositionID field in OrgData is not mapped to a field that contains a unique value.
3. WFM has not had the Manager's Employee ID entered against the Agent in the correct ADG.

User data missing from import

The most common cause for missing data is a mismatch in the mapping of the OrgData fields with WFM. Most issues can be resolved by checking the field/column names in the OrgData Config xml for spelling and formatting errors such as:

- "EmployeID" rather than "EmployeeID"
- "LeadEmploymentID" rather than "Lead Employment ID"

When mapping OrgData fields to WFM User data fields the field/column names must match exactly. Some WFM ADGs may contain spaces or special characters.

General Tips

- Employee ID is mandatory and must be unique, if duplicates are found the OrgData process will stop and the import will fail.
- ADG can often have a rouge <space> at the beginning or end of the name causing a mapping mismatch.
- When creating the Import Template the field that maps to LoginID must contain unique values. Duplicates will cause the push of data to Performance DNA to fail.

Sample OrgData Config file Mapping

```
<ImportSources
CsvFilePath=""
BackupFilePath=""
PostImportSql="">
  <Source Type="Wfm" ID="1" MergeMethod="Append">
    <Mapping Field="Username" WfmField="EmployeeId" />
    <Mapping Field="EmployeeID" WfmField="EmployeeId" IsKey="true" />
    <Mapping Field="PositionID" WfmField="EmployeeId"/>
    <Mapping Field="WfmUserId" WfmField="UserId" />
    <Mapping Field="FirstName" WfmField="FirstName" />
    <Mapping Field="LastName" WfmField="LastName" />
    <Mapping Field="Email" WfmField="Email" />
    <Mapping Field="LMPositionID" WfmField="Team Manager ID" />
    <Mapping Field="Site" WfmField="Site" />
    <Mapping Field="Team" WfmField="Team" />
    <Mapping Field="TrainingPlannerRole" WfmField="Training Planner Role" />
  </Source>
</ImportSources>
```

Changing Service Account Password

Software product name	Skills Mangement
Version Number	8.5.x and Above
Subject	Changing Service Account Password

Symptoms

- Web Service errors when logging into the websites
- 401 Authentication errors when connecting to Exchange
- Unable to validate security certificates

Resolution

Web Service errors when logging into the websites

- Open Internet Information Services (IIS),
 - Navigate to the Application Pools.
 - Right click on the Application Pool and select Advance Settings
 - Click on the ... next to the username listed under Identity to change the user details
- repeat for all of the Skills Management Application Pools

401 Authentication errors when connecting to Exchange

- Log into Performance DNA / Training Manager Portal as an Administrator
- Navigate to Systems Settings
 - On the General tab update the account details used for the Exchange integration.
 - Click Test Exchange Settings to validate the new credentials
- Click Save at the bottom of the page

If the Exchange / Outlook account has changed the Config file for the Email Messaging application may also need updating.

Unable to validate security certificates

This issue is generally caused by the login / Security services having incorrect user details and is resolved by updating the Application Pool user details.

Other credentials to check

The Windows server Invoker Service may also require a password update.

- Open the Services Window and locate the Invoker Service.
- Right click and select Properties
- In the Logon tab enter the updated user details.

Scheduled Tasks

- Open the Task Scheduler application.
- Open the Task Library and locate the schedule tasks
- Right click and select properties
- Update the Security Options with the new user details.

Repeat for all Skills Management tasks.

DNA Connection error when upgrading to 9.0.x

Software product name		Skills Mangement
Version Number		8.5.x and below
Subject		DNA Connection error when upgrading to 9.0.x

Symptoms

9.0.x upgrade of Skills Management unexpectedly fails.

When checking the installation logs the following SqlClient.SqlException is caught:

CA : Getting Dna Connection Strings

CA : Publish DNA Database starting

CA : Building migration list

CA : Start publishing migrations

CA : APPLY : 2014-03-13 17:05:11 - DNAContext.InitialCA : ERROR :

System.Data.SqlClient.SqlException (0x80131904): A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server)

Resolution

Invalid DNA Database connection string

Open SQL management Studio and view the SystemesSettings table in the SkillsAssessor (PerformanceDNA)

Example script:

```
BEGIN TRANSACTION
Select *
from SystemSettings
ROLLBACK
```

Check for SettingID 24 from the returned data.

If SettingID 24 is present then DNA was originally configured and the Connection settings are likely to

be invalid or out of date. In order to correct this please login to the Tenant Admin site and check the DNA settings.

*If you continue with this fix **ALL** historical **DNA data** could be lost.*

Check for SettingID 25 from the returned data. If there is an encrypted SettingValue string. We will need to remove this entry from the database.

Example script:

```
BEGIN TRANSACTION
DELETE SystemSettings
where SettingID = 25 and TenantID=-1
ROLLBACK
```

TenantID will need to be updated to reflect the correct Tenant. Setting the incorrect TenantID will result in another Tenant's historical DNA data being lost

Other considerations to check

If working on a multi-tenanted environment this may need to be repeated for each Tenant as the install process will loop through each Tenant's System Settings and fail on the first incorrect connection string.