• Hello - intro etc

• (Before Next Slide) What problem are we trying to solve?

• This is a problem I face every year but today we are not going to talk about this one J

• The problem is the amount of time the DBA time spendanswering questions, giving advice and the number of people who need those answers. Constant interruptions by Email, Lync, Phone and Drive-Bys reduce the DBAs quality work time (and stop them drinking coffee and laughing at DBA Reactions - When the Compliance team come and ask how many servers in Bolton, you know they will come back and ask more questions such as how many with XPCMDShellEnabled

TRUE Story Over the space of one morning whilst I was busy with what is called a P2 incident (not quite major but pretty close) One of the security compliance teeam came over to me and asked

How many Servers in Bolton

How Many SQL 2005

Of those 2005 servers – How many have XPCMDShell Enabled

Actually I need to know the total with XPCMDShell Enabled by version

This took me over 4 hours

• Also removing the old ways of gathering information. It is better not to use Excel sheets - why waste the storage? Or having to RDP or even Powershell to a server to get information

• Instant views for the DBA team to be able to glance at to get the information. Automatically updated because automation is king Mention John Sansom - The Best DBAs Automate Everything

• But also I want people to help themselves. If I can provide them with a single source of truth which will reduce the time they come and interrupt my team and I all the better

• What do we need? SQL to store the data. PowerShell to gatherthe data (I am using Powershell version 4 here on Server 2012) Power Bi to display the data, share the data and enable people to query it and LocalKnowledge - Back of Fag Packet, Inside the longest serving team members head, CMS, Server Spreadsheet, SCCM etc etc you have to be able to get it. This may take some time and will need refining at times as one persons version of the truth may not be the 'actual' version

• How to Do It - The first part is to gather the information - understand who has it, who to ask, what information you require,

• This is the manual part. This is the time consuming part but once it is done the rest will be automated (unless you wish to add Clients to the solution which I recommend but is even more manual) We will fill in this table entering as much information as we have including port numbers to copewith none-standard static ports ( NOTE - you will have to alter the PS scripts if you use dynamic ports to remove the $Port from the $Connection)

• Explain the picture

DEMO

1. Start with the Instance List table
2. Then show the Server Info Script
3. Then walk through the SQLInfo script
4. Explain Write-log
5. Explain Catch-Block
6. Show the Query to gather the information and put together the Connection string and show how to remove the Port if required
7. Explain looping through the Servers
8. Explain the checking for Connection check with version demo
9. $srv|gm

Then into Power Bi and create the Agent Jobs report

1. Talk about the measures that get created and show them (don’t create them)
2. Talk about the calculated columns
3. Create chart and gauge
4. Create the report
5. Show how it changes when click on prod environment etc
6. Publish it to powerbi.com
7. Log in - show the data set, reports and create a dashboard
8. Explain how to share the dashboard
9. Show some natural language queries

Beard Demo SQL

1. How many servers in bolton with xpcmdshellenabled true by version as a table
2. Show me servername collation and isfulltextinstalled in exeter
3. How many servers by version as a tree map donut

Beard Demo Database

1. what locations are metallica client
2. what locations and database names that hold metallica client
3. what are the database names and sizegb for metallica
   1. As a bar
   2. Then as a column
   3. As a treemap
4. which client name are in bristol/exeter/southampton/bolton

But this doesn't work as you think

1. which client name are in Bolton and sizegb as a treemap
2. which client names are in bolton with external true and sizegb as a table

And get the total

1. which client names are in bolton with external true and total sizegb as a table
2. how many databases ismirroringenabled true
3. when was the last backup for the eagles and database name
4. when was the last backup for the eagles and database name and instancename and servername adn environometn
5. show name dataspaceusagekb indexspaceusagekb and spaceavailablekb as a table order by dataspaceusage descending

Beard Demo SQL Agent Jobs

1. Show failed by last run dayofweek this month
2. Show failed true by last run dayofweek this month