

An Evening with the Chief Architect

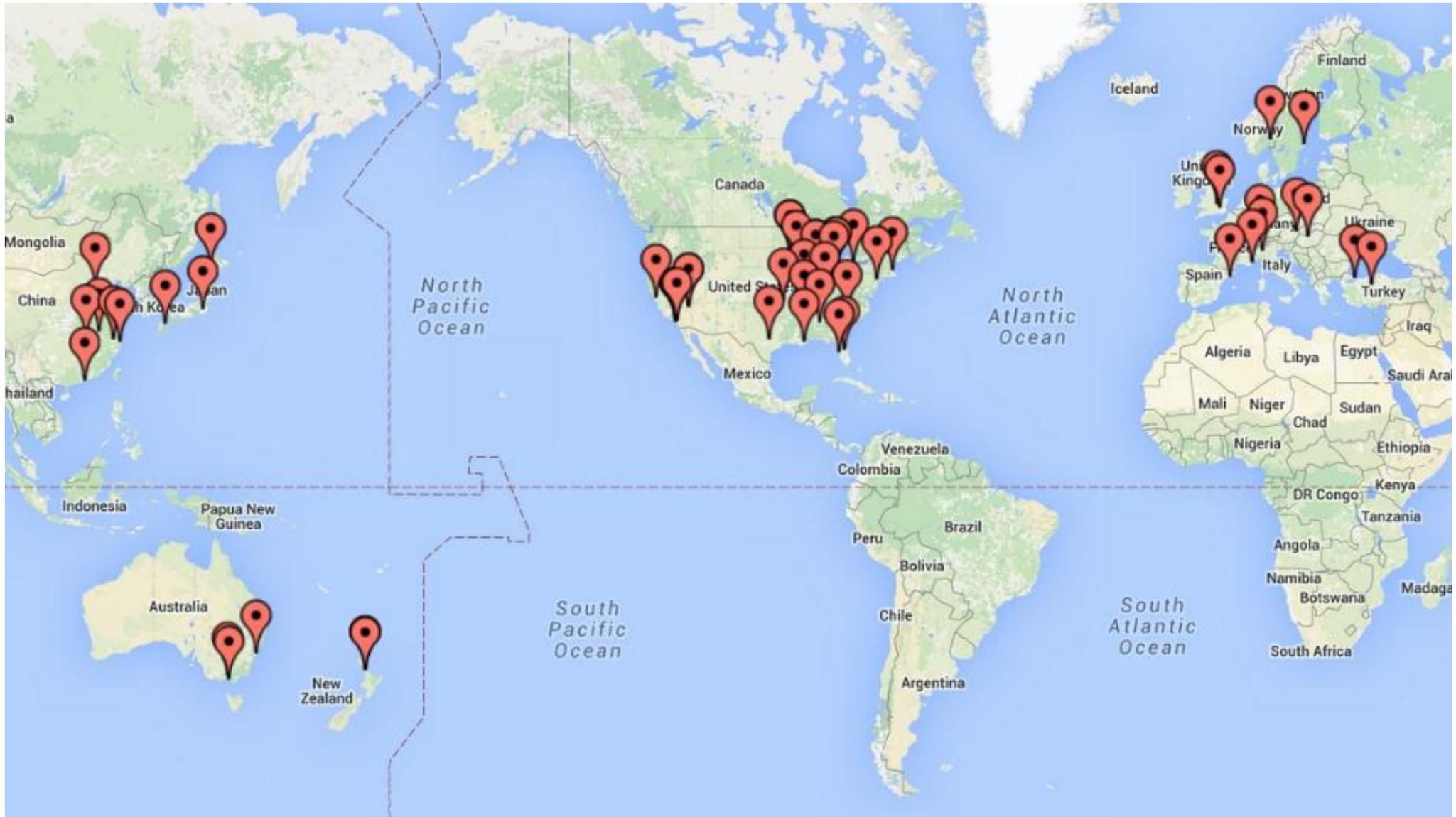
IBM i on POWER Directions & Update

Steve Will
IBM i Chief Architect
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18 April 2017









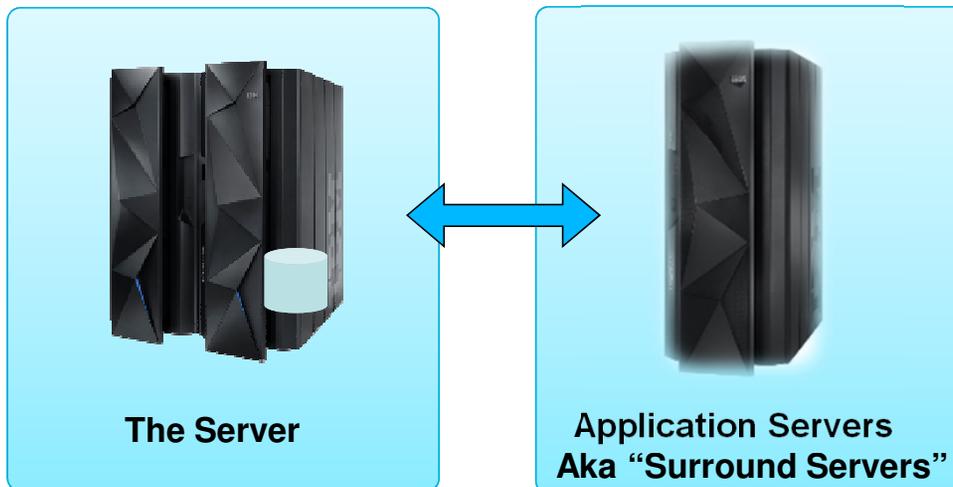
BACK
to the
Past

AS/400®



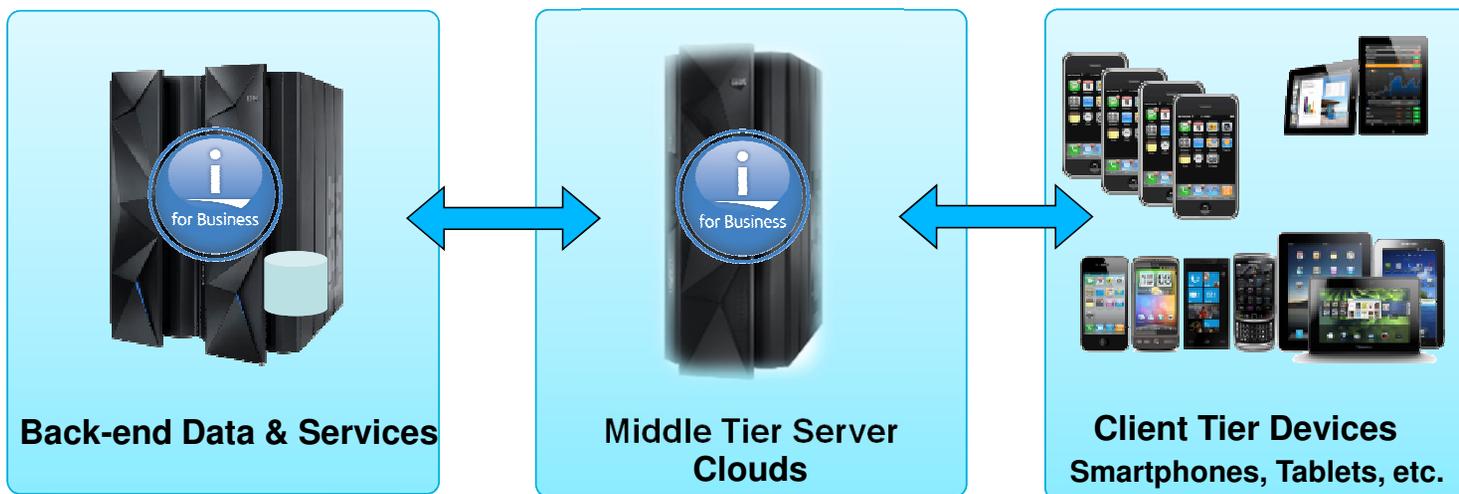
THE System

iSeries



Systems of Record

Systems of Engagement



2008



2000



IBM iSeries

1988

AS/400®



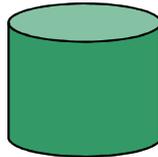
IBM i Business



Requirements for Business Solution Platform

Data

Fast Access
Easy Management
Reliable Storage



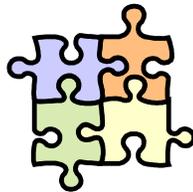
Security

Business Data
Easy Administration
System Integrity



Integration

Single Source
Just Add Applications
It's All There



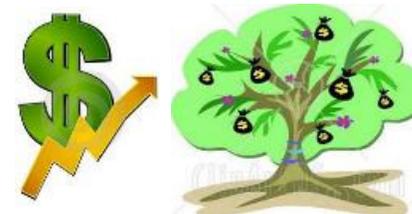
Flexibility

Many Functions
Capable of Growth
Simplicity



Investment Protection

Focus on Business, not Technology
Solutions Keep Working as Technology Changes
Additional Software Development Yields Additional Function



IBM i Architecture

DB2 for i & Single Level Store



Automate & optimize storage management

Object Based Architecture

Defined Interface			Defined Interface		
Call	TFRCTL	Display Attributes	Open	Update Record	Display Attributes
Access Authority Check			Access Authority Check		
Program Object			File Object		

A program cannot masquerade as data and visa versa.

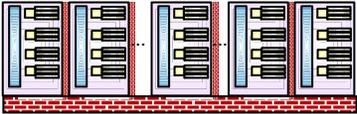
Enables integrity, security, virus-resistance

Integration



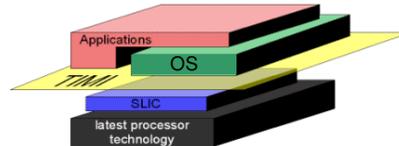
Integrates business components, e.g. DB2 database

Virtualized Work Management



Provides built-in application virtualization

Technology Independent Machine Interface



Ensures application compatibility across multiple technology generations

A system designed for business

IBM i in the modern IT world.

Get your IBM i Strategy Whitepaper
and roadmap for Power Systems.



bit.ly/IBM_i_2016_Roadmap

Power Systems 

IBM.

IBM i Strategy Whitepaper | 2016



bit.ly/IBM_i_2016_Roadmap

“IBM i plays a critical role in our Power Systems software portfolio.

We continuously provide new solutions and are actively engaged in expanding into new technology areas to support the new business requirements of our clients.”

Doug Balog
General Manager, Power Systems

IBM i – IBM Commitment



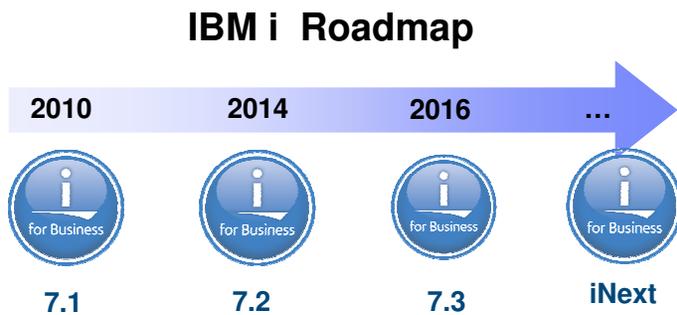
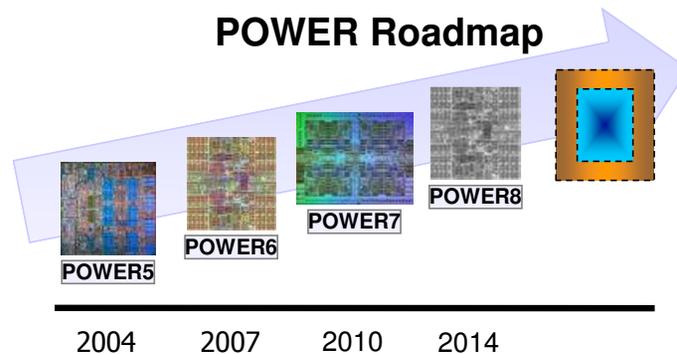
June 27, 2016

"Many of our largest clients run their critical workloads on IBM i, and I don't see that fundamentally changing," Balog says.

"We have a long roadmap that goes out at least 10 years from a development standpoint, and it is only 10 years because I can't see beyond 10. We will keep innovating and providing capabilities around IBM i.

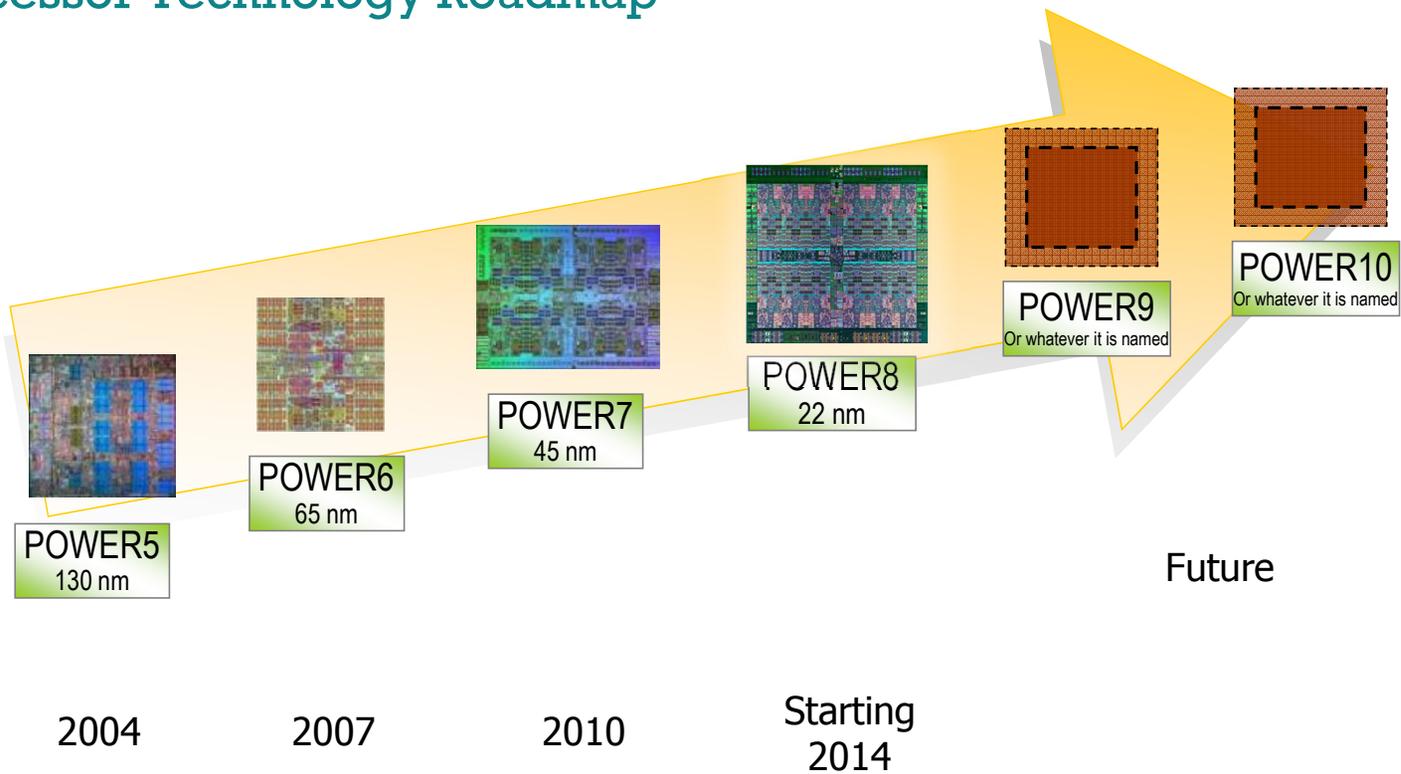
Doug Balog
General Manager, Power Systems

The Future of IBM i - The Roadmaps

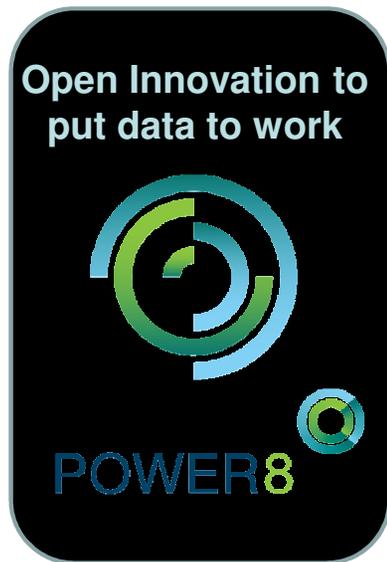


	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27								
VSR4	[Bar]																											
IBM i 6.1	[Bar]																											
IBM i 7.1			[Bar]																									
IBM i 7.2				[Bar]																								
IBM i 7.3					[Bar]																							
IBM i Next																												
IBM i Next + 1																												

POWER Processor Technology Roadmap



A New Generation of IBM Power Systems



Designed for Big
Data

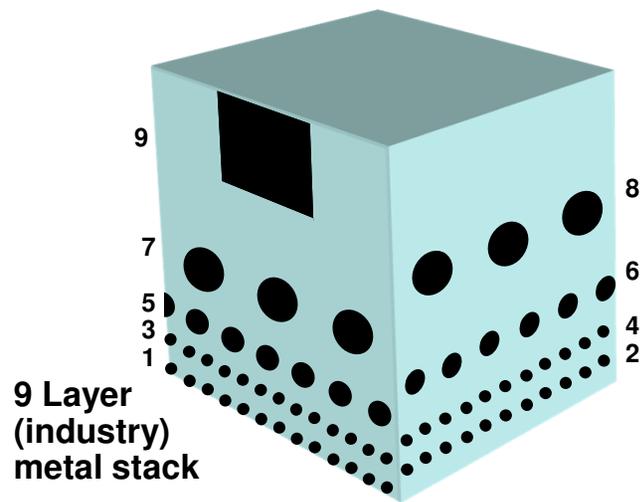


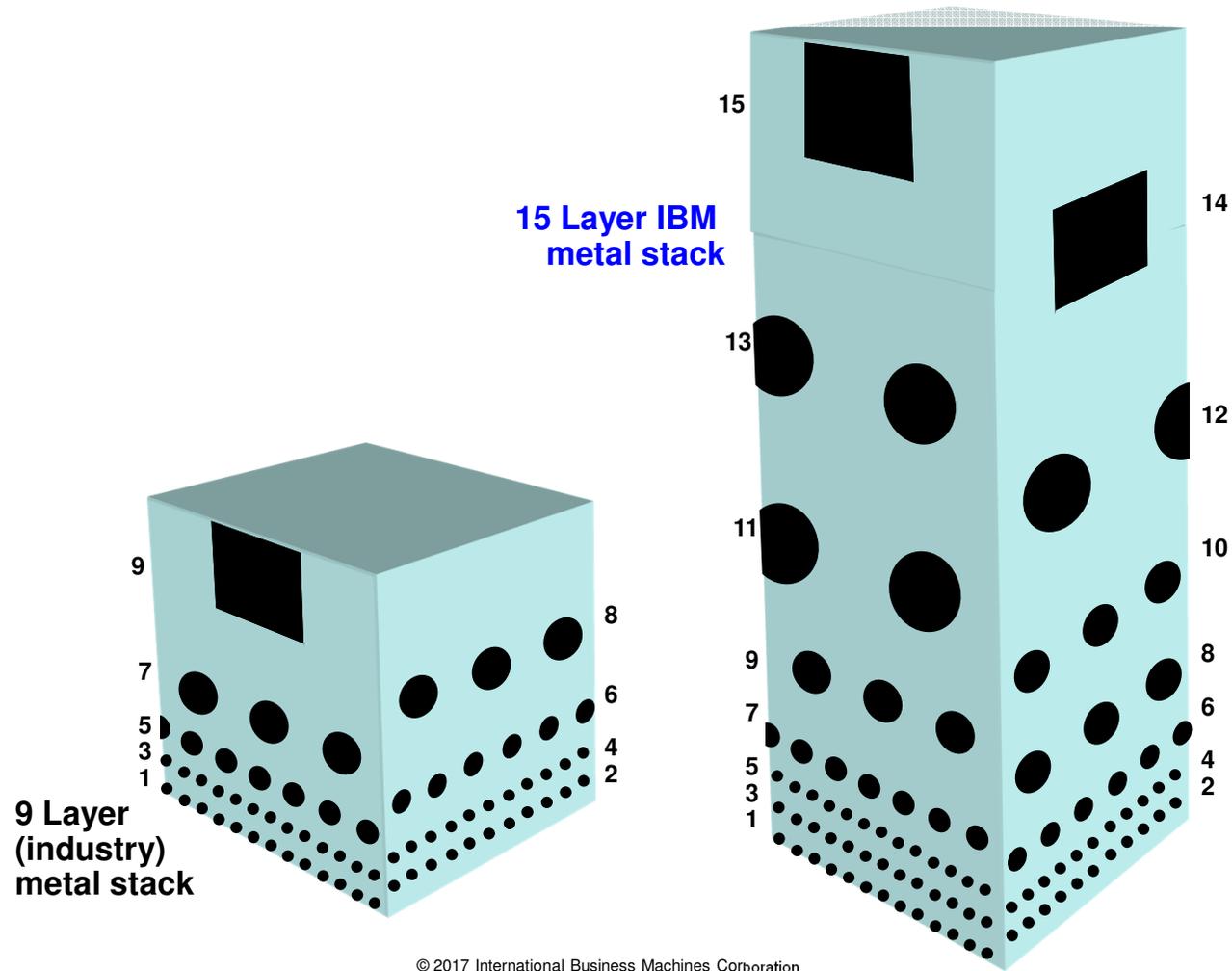
Superior Cloud Economics



Open Innovation
Platform

Strength of IBM POWER8: 22nm Semiconductor 15LM

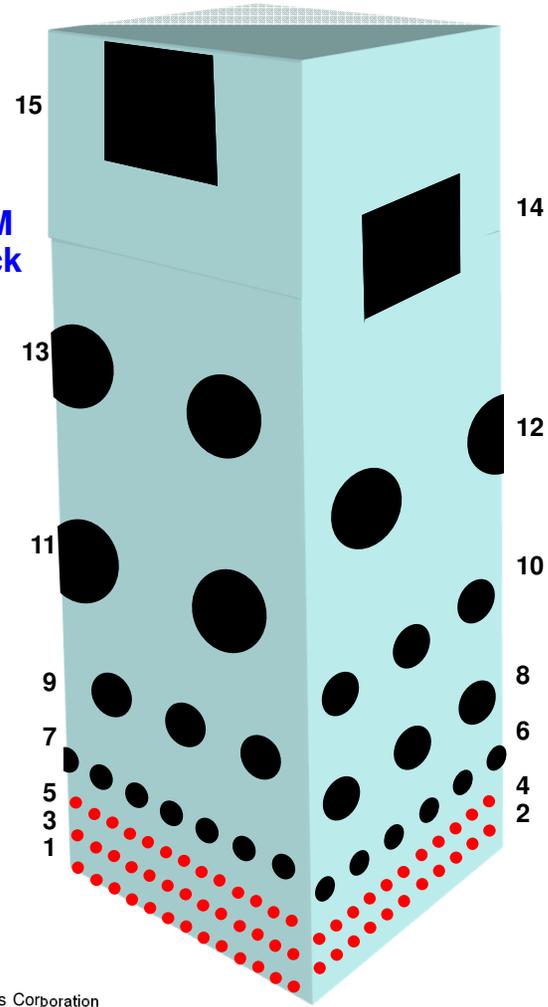
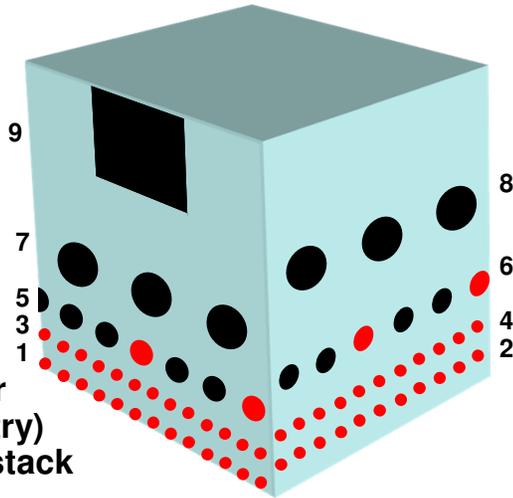




Low level wires used for dense local circuit interconnect.

15 Layer IBM metal stack

9 Layer (industry) metal stack

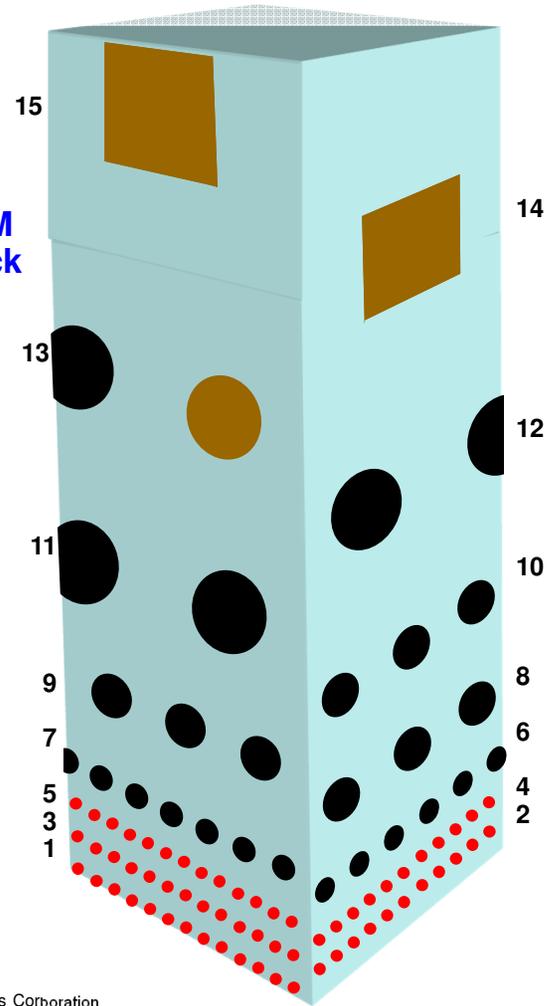
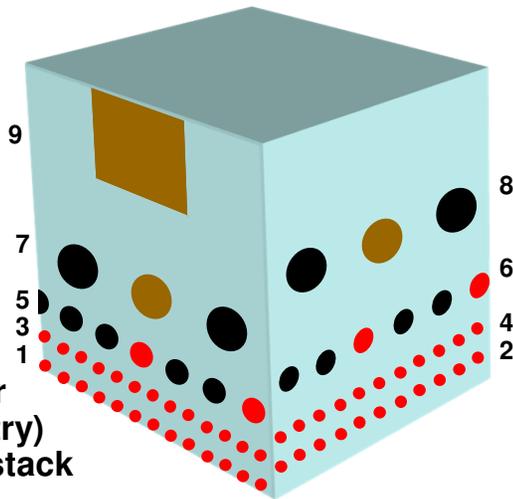


Low level wires used for dense local circuit interconnect.

Top level wires used for power distribution, clocks, and off-chip signalling.

15 Layer IBM metal stack

9 Layer (industry) metal stack

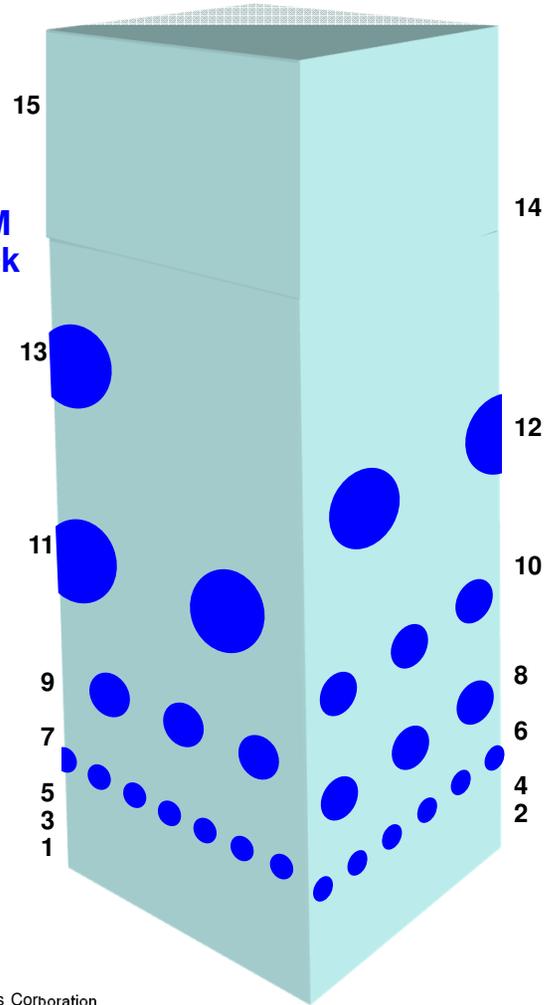
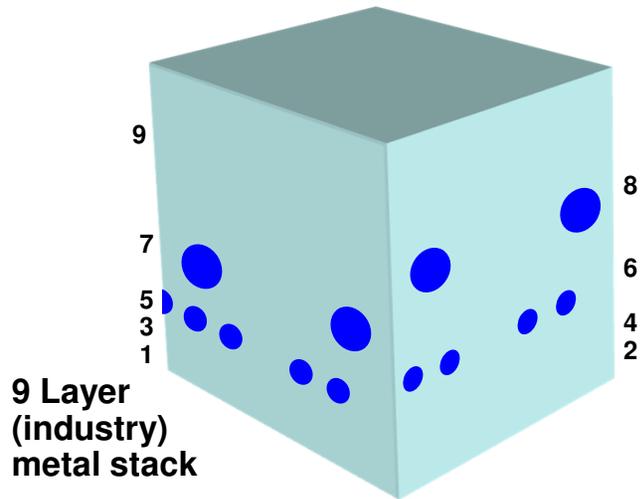


Remaining wires form on-chip highway system (varying speeds)

Industry	IBM
0	4
4	9
8	12
<u>12</u>	<u>25</u>

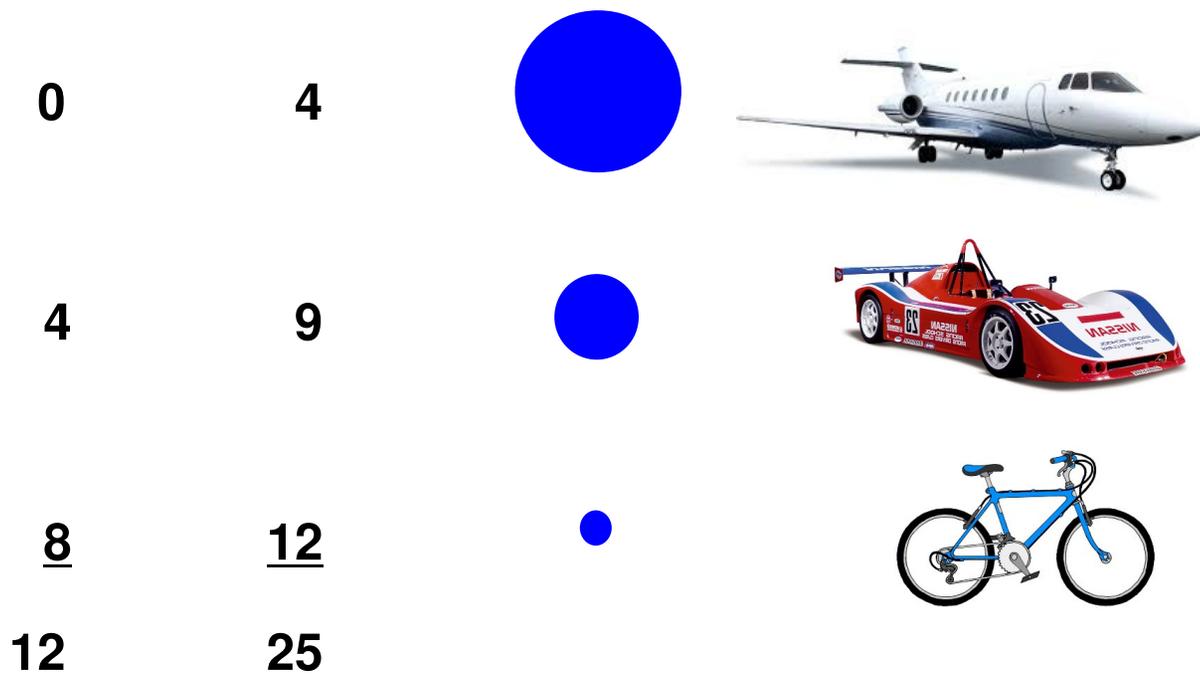


15 Layer IBM metal stack



Comparing POWER8 to Industry – On-Chip Speeds

Industry IBM



IBM i Releases

2010

2014

2016



7.1

7.2

7.3

iNext

iNext + 1

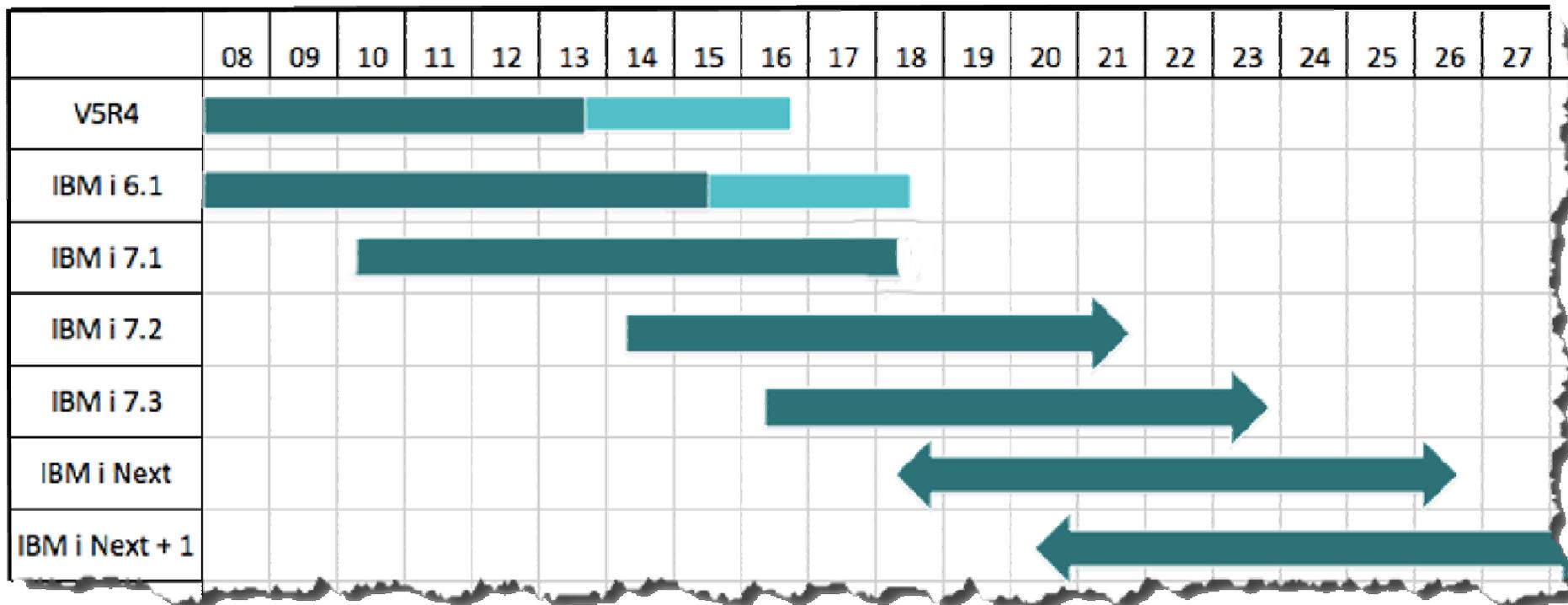
Technology Refreshes



- Three Major Releases supported.
- Two Future Major Releases under development.
- Semi-annual Technology Refreshes for additional non-disruptive new function.

** All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

IBM i Support Roadmap



** Arrows indicate general timeframes, not specific dates.

** All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

IBM i System Support

<http://www-01.ibm.com/support/docview.wss?uid=ssm1platformibmi>

Systems	IBM i 7.1	IBM i 7.2	IBM i 7.3
POWER8 S814, S822 (VIOS only), S824, E870, E880	✓	✓	✓
POWER7/7+ Servers Power 710, 720, 730, 740, 750, 760, 770, 780, 795	✓	✓	✓
POWER7/7+ Blades and Compute Nodes PS700/701/702/730/704, PureFlex p260/460	✓	✓	
POWER6+ 520, 550, 560, JS23/43 POWER6 520, 550, 570, 595, JS12/22	✓	✓ ¹	
POWER5/5+ 515, 520, 525, 550, 570, 595	✓		

Note 1 – no IOP or HSL support

IBM i Strategy



Power Solutions

- Delivering an integrated platform focused on leading industry applications
- Providing flexible solutions delivery options for ISVs and MSPs
- Enabling clients to transform their customer experience via mobile solutions



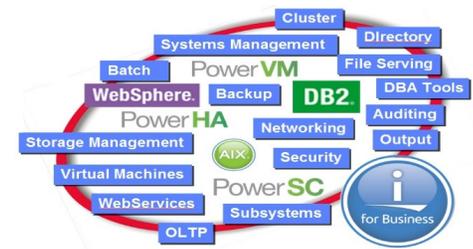
Open Platform for Choice

- IBM delivered IBM i 7.3 in 2016, confirming commitment
- Growing IBM i solutions options including open source languages and applications
- Extending IBM i solutions portfolio with Linux and AIX application choices



The *Integrated* Promise of IBM i

- Deliver a simple, high value platform for business applications
- Provide exceptional security and resiliency for critical business data
- Leverage IBM systems, storage and software technologies



7.2 Major Enhancements

- DB2
 - Row & Column Access Control – “Need to Know” built into DB2
 - “In-Memory” highlight & new functions
- Managing the System
 - Any device: Mobile, Web or PC/Mac/Linux
 - Fully Cloud Capable OS, with PowerVM & PowerVC
- Solution Development
 - Free-Form RPG for rapid learning and lower maintenance costs
 - PHP, Perl, Ruby, node.js etc. options in Application Development



Developers: IBM i speaks your language.

Meet IBM i 7.3 with new support for Git and Orion.

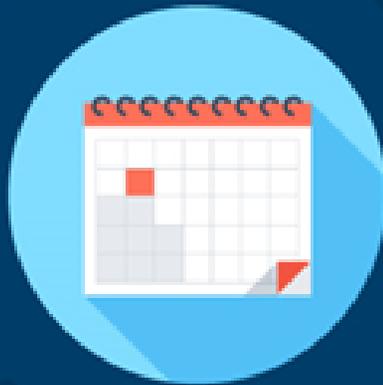


You think you know IBM i? You haven't met 7.3.

The platform you know and love.
The capabilities you've asked for.



IBM i 7.3 now lets you:



**Deepen your
data insight.**



**Forecast
trends with more
advanced analytics.**



**Enhance Security
Management.**

IBM i 7.3 – Simplify Insights, Intelligent Security & the Power of Integration

- Historical data simplifies business insights for the future
- Intelligent Security matches actual authority with policy
- Integrated data analytics for new insights
- Extensive integrated application development options



IBM i 7.3 – Simplify Insights, Intelligent Security & the Power of Integration

- Historical data simplifies business insights for the future
 - **DB2 Temporal support** automatically maintains history
- Intelligent Security matches actual authority with policy
 - **Authority Collection** analysis ensures continuous operation
- Integrated data analytics for new insights
 - **OLAP enhancements** built into DB2 for i
- Extensive integrated application development options
 - Easy-to-learn **RPG + Open Source** development technology
- **And much, much more!**



IBM i 7.3 and 7.2 TR Information



IBM Systems
MAGAZINE

AIX LINUX ON POWER MAINFRAME POWER

IBM i ADMINISTRATOR DEVELOPER TRENDS TIPS & TECHNIQUES CASE STUDIES

Blog

You and i *IBM i Trends and Strategies*

 Previous Post | Next Post | See All Posts

IBM i 7.3 Technology Refresh 1 Announcement

October 11, 2016



IBM Systems
MAGAZINE

AIX LINUX ON POWER MAINFRAME POWER

IBM i ADMINISTRATOR DEVELOPER TRENDS TIPS & TECHNIQUES CASE STUDIES

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You and i *IBM i Trends and Strategies*

Previous Post | See All Posts

Announcing IBM i 7.3 TR2 & 7.2 TR6

February 14, 2017

This might come as a bit of a surprise, but it's announce day again. I know, I know--it doesn't seem all that long ago that we announced IBM i 7.3 Technology Refresh 1. And it wasn't! But this year's "spring" announcement of IBM i 7.3 TR2 (and the

 By Steve Will

Blogs

<http://www.ibmssystemsmag.com/Blogs/You-and-i/>

developerWorks

Fall 2016

<http://www.ibm.com/developerworks/ibmi/techupdates/i72-TR5>

<http://www.ibm.com/developerworks/ibmi/techupdates/i73-TR1>

Winter 2017

<http://www.ibm.com/developerworks/ibmi/techupdates/i72-TR6>

<http://www.ibm.com/developerworks/ibmi/techupdates/i73-TR2>

IBM i 7.3 TR2 Overview

- S812
- DB2
 - JSON
 - SQL Services
- Access Client Solutions Version 1.1.7.0
 - Schemas
 - But Don't Forget Run SQL Scripts and so much more!
- Open Source
 - rsync, wget, curl, SQLite
 - git enhancement
 - GOLICPGM list
- DB2 WebQuery
 - “Easy Button” install
 - Sample Admin Graphical Reports
 - New Redbook

Power S812



8284-21A

Entry price server

- 1-core server for IBM i
- 4-core server for AIX



- Single partition
- no virtualization
 - Not for Processor, memory or I/O
 - No VIOS, No PowerVC
- no Linux
- Simpler memory & I/O options

Power S812 1-core entry server



8284-21A

	Power System S812
POWER8 Processor	3 GHz
Cores	1
Maximum Memory	64 GB
System unit PCIe slots	6* PCIe Gen3 (low profile)
“Base” Ethernet PCIe adapter	4-port 1 Gb required
SAS bays in system unit	8 SFF-3 bays
Integrated write cache	Optional (Strongly urged for HDD)
Bay for DVD in system unit	Yes
Bay for tape in system unit	No
Bay for RDX in System unit	No
VIOS or PowerVM	No
HMC	Single partition, rarely needed
Max number of partitions	1
PCIe Gen3 I/O Drawer	No
EXP24S or EXP24SX	No
Footprint	2U in rack
IBM i tier	P05 Max 25 users**
IBM i prerequisite	7.2 TR6 or 7.3 TR2 or later
Dual power supply	900W = 110V or 220V

** see definition of 25 users

* 5 PCIe slots when SAS backplane with write cache used

1-core S812 vs 4-core S814



	Power System S814	Power System S812
POWER8 Processor	3 GHz	3 GHz
Cores	4	1
Maximum Memory	64 GB	64 GB
System unit PCIe slots	7 PCIe Gen3 (full high)	6* PCIe Gen3 (low profile)
“Base” Ethernet PCIe adapter	1 Gb or 10 Gb	1 Gbt
SAS bays in system unit	10 SFF-3 bays	8 SFF-3 bays
Integrated write cache	Optional (Strongly urged for HDD)	Optional (Strongly urged for HDD)
Bay for tape in system unit	No	No
Bay for RDX in system unit	Yes in tower, No in rack	No
VIOS or PowerVM	Optional	No
HMC	Optional	Single partition, rarely needed
Max number of partitions	4 x 20 = 80	1
PCIe Gen3 I/O Drawer	No	No
EXP24S or EXP24SX	No	No
Footprint	Tower or 4U in rack	2U in rack
IBM i tier	P05	P05 max 25 users
IBM i prerequisite	7.1 TR8 or 7.2, 7.3 or later	7.2 TR6 or 7.3 TR2 or later
Dual power supply	900W = 110V or 220V, 1400W = 220V	900W = 110V or 220V



* 5 PCIe slots when SAS backplane with write cache used

1-core S812 vs S822



	Power System S822	Power System S812
POWER8 Processor	3.8 or 3.4 or 4.1 GHz	3 GHz
Cores	6, 8, 10, 12, 16 or 20	1
Maximum Memory	1 TB	64 GB
System unit PCIe slots	6 – 9 PCIe Gen3 (full high)	6* PCIe Gen3 (low profile)
“Base” Ethernet PCIe adapter	1 Gb or 10 Gb	1 Gbt
SAS bays in system unit	8 – 12 SFF-3 bays	8 SFF-3 bays
Integrated write cache	Optional – all I/O through VIOS	Optional (Strongly urged for HDD)
Bay for tape in system unit	No	No
Bay for RDX in system unit	No	No
VIOS or PowerVM	VIOS mandatory, PowerVM =yes	No
HMC	Optional	Single partition, rarely needed
Max number of partitions	80, but max 4 core per i partition	1
PCIe Gen3 I/O Drawer	Max 1	No
EXP24S or EXP24SX	Max 28	No
Footprint	2U in rack	2U in rack
IBM i tier	P10	P05 max 25 users
IBM i prerequisite	7.2 TR 3 or i 7.1 TR 11 or later	7.2 TR6 or 7.3 TR2 or later
Dual power supply	1Socket =900W; 2 socket =1400W	900W = 110V or 220V



* 5 PCIe slots when SAS backplane with write cache used

Power S812 1-core entry server



8284-21A

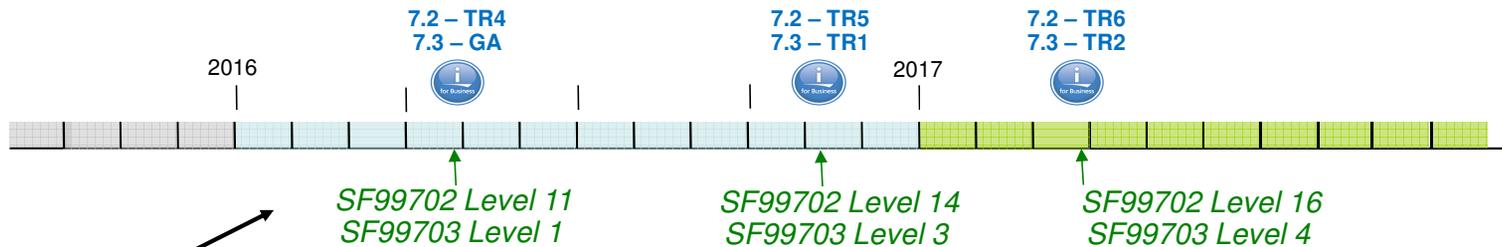
S812 IBM i Express Edition (#EU2E)

- 5 no charge IBM i user entitlements
- Unlimited users for IBM i Access Family
- Reduced price development tools
- Up to four lower priced 283GB 15k disk drives

Capacity BackUp #0444 specify

- Can transfer users from registered primary server to S812 CBU server
- Primary server can be POWER8 or POWER7 P05 or P10 software tier server

DB2 for i – Enhancements delivered via DB2 PTF Groups



Enhancements timed with TR4

- Inlined UDTFs
- Trigger (re)deployment
- More IBM i Services
- New DB2 built-in Global Variables
- Enhanced SQL Scalar functions
- Evaluation option for DB2 SMP & DB2 Multisystem

Enhancements timed with TR1 & TR5

- JSON_TABLE()
- INCLUDE for SQL Routines
- Database features in ACS
- Faster Scalar Functions
- More IBM i Services
- New DB2 for i Services
- And much more...

Enhancements timed with TR2 & TR6

- **JSON predicates**
- **Additional Database features in ACS**
- **New and enhanced SQL Scalar Functions**
- **New IBM i Services**
- **Enhanced DB2 for i Services**
- **And more...**

www.ibm.com/developerworks/ibmi/techupdates/db2

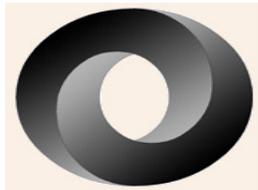
It's About Time

Who should care about these database enhancements?

1. Database Application Developers
→ New SQL capabilities enable modern solutions and improved programmer productivity
2. System Administrators and Security Officers
→ New IBM i Services enable advanced Systems and Security Management on IBM i
3. Database Engineers
→ New ACS capabilities provide a productivity boost to the DBE



JSON support in DB2 for i



DB2 JSON Store

JSON_TABLE()

JSON Query support:
Predicates:
• IS JSON
• JSON_EXISTS



June 2015

November 2016

March 2017

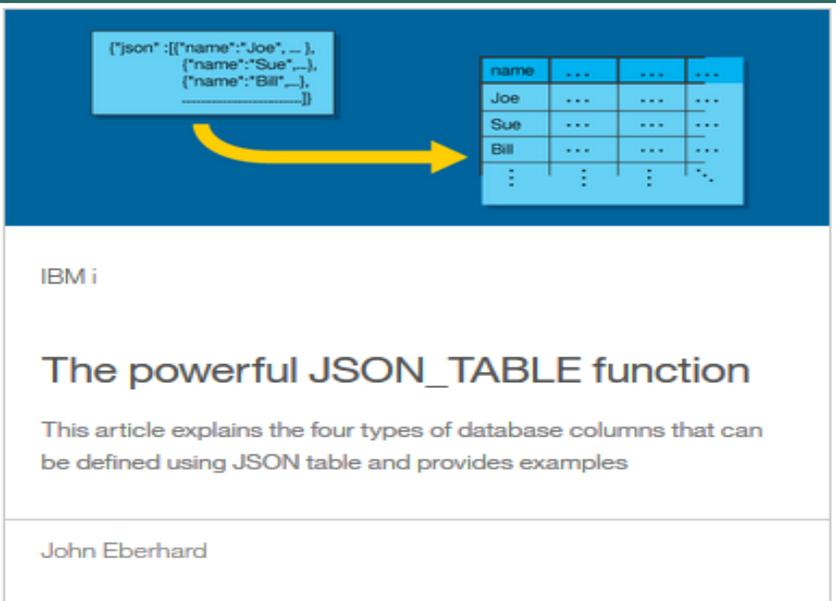
IBM i 7.1, 7.2, & 7.3

IBM i 7.2 & 7.3

IBM i 7.2 & 7.3

JSON_TABLE

- Allows queries to process JSON as relational data
- Leverage HTTP functions to tap external JSON data sources
- Conceptually similar to XML_TABLE



The diagram illustrates the concept of JSON_TABLE. On the left, a JSON array is shown: `[{"name": "Joe", ...}, {"name": "Sue", ...}, {"name": "Bill", ...}]`. A yellow arrow points from this JSON to a table on the right. The table has a header row with 'name' and three columns of dots. The rows below are 'Joe', 'Sue', and 'Bill', each followed by three dots. Below the diagram is a screenshot of an IBM i article titled 'The powerful JSON_TABLE function' by John Eberhard. The article text reads: 'This article explains the four types of database columns that can be defined using JSON table and provides examples'.

“The powerful JSON_TABLE function”

<http://www.ibm.com/developerworks/ibmi/library/i-json-table-trs/index.html>

New IBM i Services

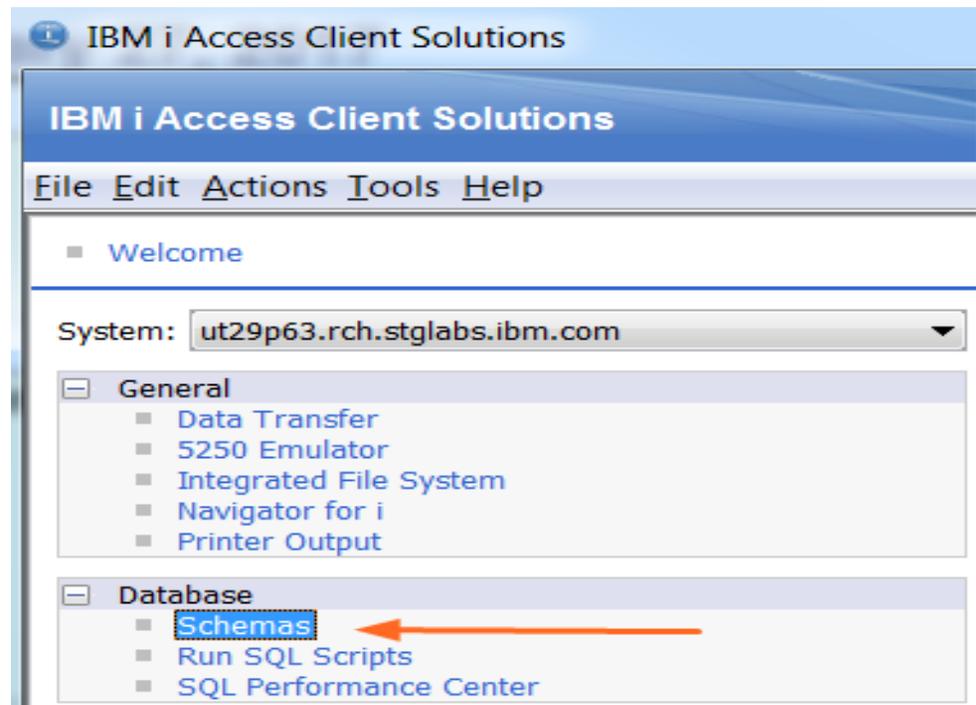
- **QSYS2.AUTHORIZATION_LIST_INFO** – Similar to the Display Authorization List Objects (DSPAUTLOBJ) CL command
- **QSYS2.AUTHORIZATION_LIST_USER_INFO** – Similar to the Display Authorization List (DSPAUTL) CL command
- **QSYS2.OBJECT_PRIVILEGES** – Similar to the Display Object Authority (DSPOBJAUT) CL command
- **QSYS2.USER_INFO** – Add Supplement Group detail
- **And more...**

IBM Access Client Solutions for i (ACS)

ACS Version 1.1.7.0 (planned for March, 2017)

- **Run SQL Scripts**
 - CL Prompting
 - Enhanced SQL Highlighting
 - Show Object References
 - Upload Results
 - More “Insert from Examples”
- **Printer Output**
 - Multiple User Filter
- **IFS**
 - Filter

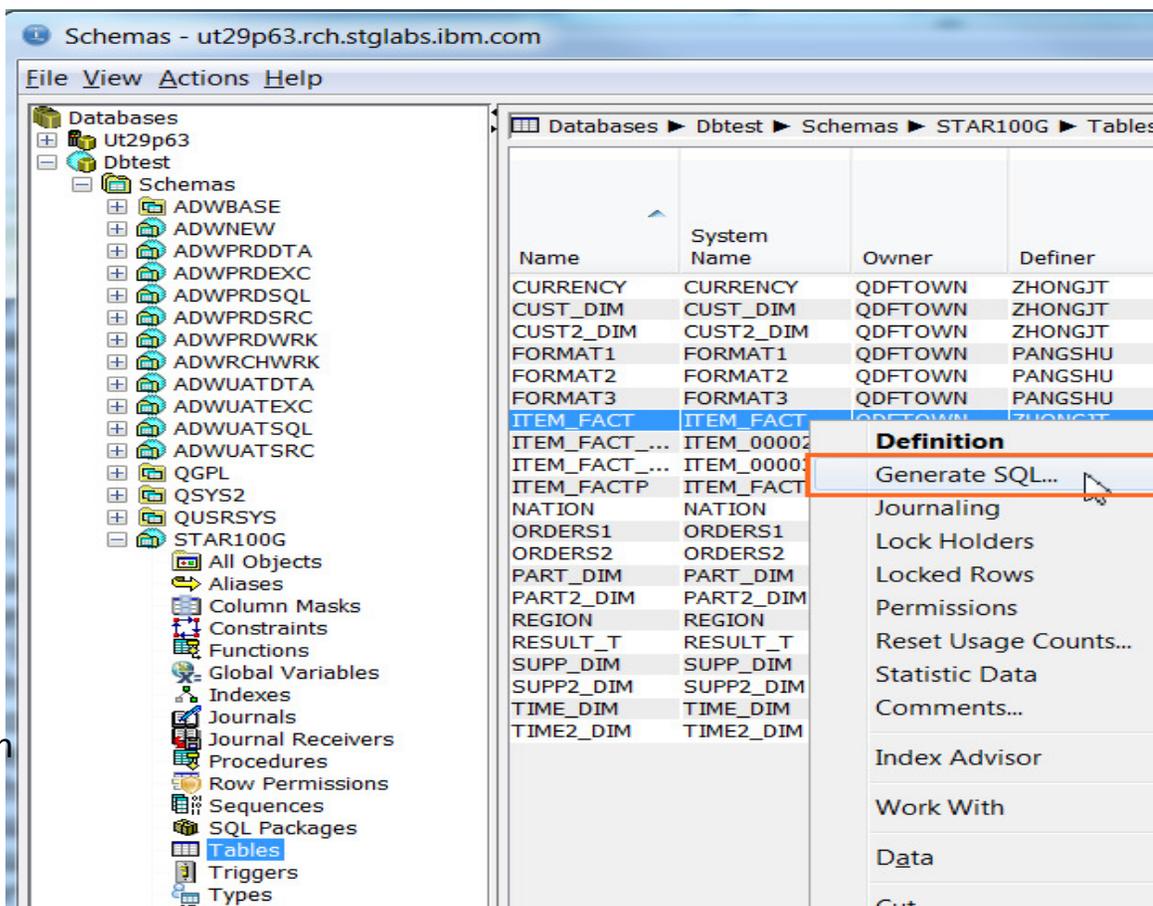
- **Schemas**



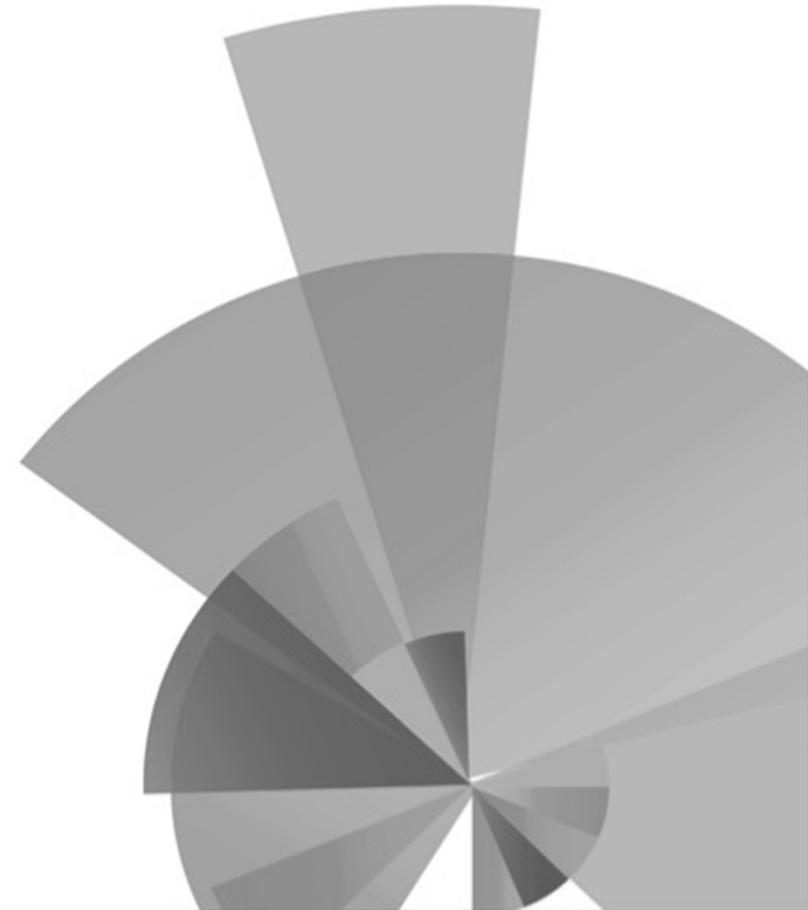
Schemas in ACS

Supported Actions:

- Definition
- Description
- Generate SQL
- Properties
- Rename
- New Database Object
- Explain
- Data
 - View
 - Clear
 - Copy
 - Initialize
- More to come...
- Actions also enabled in Visual Explain

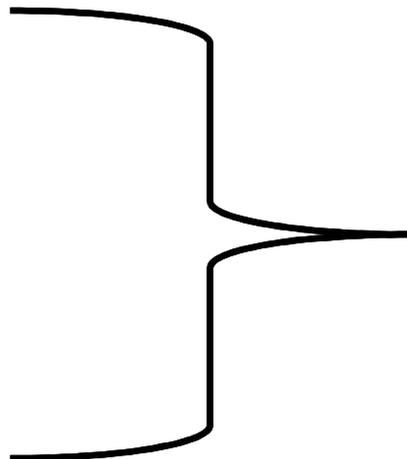


Open Source and IBM i



2016 options added to 5733OPS

- Option 1 – Node.JS 2.x
- Option 2 - Python 3.4
- Option 3 – GCC / chroot
- Option 4 – Python 2.7
- Option 5 – Node.JS 4.x
- Option 6 – Git
- Option 7 – Tools
- Option 8 – Orion
- Option 9 – cloud-init
- Option 10 – Node.JS 6.x



New



rsync

- Synchronize files and directories between systems
- Cross-platform
- Various techniques for determining if file needs update



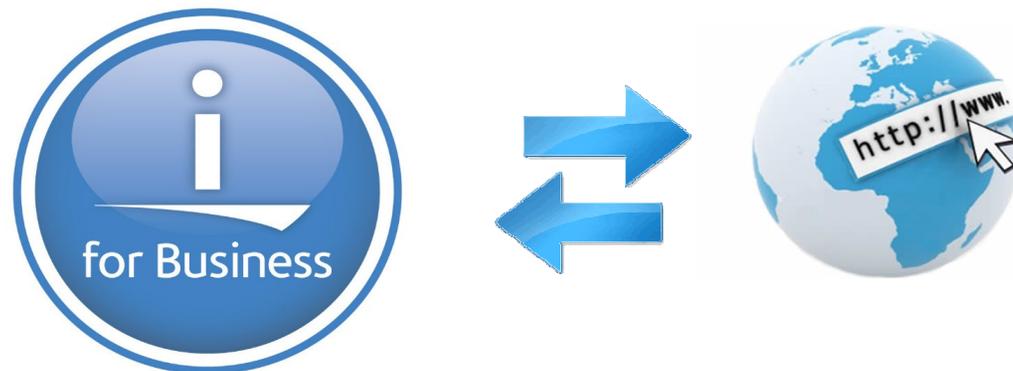
wget

- utility that lets you download files from the Internet or intranet locations.
- Supports:
 - HTTP, HTTPS, and FTP protocols
 - proxies
 - non-interactive use



curl

- Both a command and a shared library
- Robust interaction with HTTP or FTP URL's
- Supports
 - HTTP, HTTPS, and FTP protocols
 - proxies
 - non-interactive use
 - advanced HTTP operations like HTTP POST and GET requests
 - FTP upload
 - user authentication
 - much more!



SQLite

- Zero-configuration SQL database engine
- Easy to use
- Useful for open source software that uses this technology.

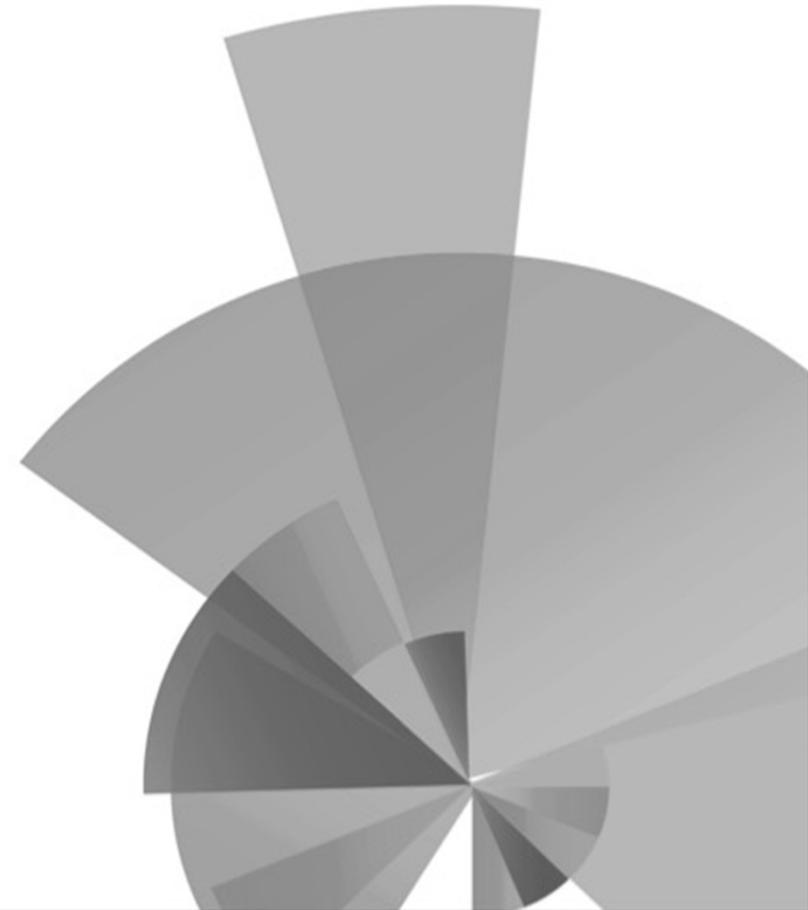


"go licpgm" option 10

```
57330PS    *BASE    IBM i Open Source Solutions
57330PS    1        Node.JS v0.x
57330PS    2        Python 3.x
57330PS    3        Chroot with gcc
57330PS    4        Python 2.x
57330PS    5        Node.JS v4.x
57330PS    6        Git
57330PS    7        Tools
57330PS    8        Eclipse Orion
57330PS    9        Cloud-Init for i
57330PS   10        Node.JS v6.x
```

DB2 Web Query EZ-Install Package

Doug Mack
DB2 for i Analytics Consultant
IBM Lab Services
mackd@us.ibm.com



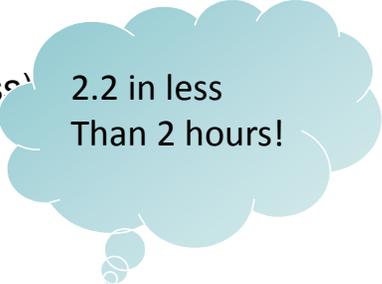
Use Cases

- You're a prospective customer that wants to evaluate DB2 Web Query – how do I get an environment set up quickly to help me do that
- You're a Business Partner or IBMer and you want to spin up a DB2 Web Query installation to demo using a full set of pre-built reports
- You're an existing customer wanting to spin up an instance of the latest version of DB2 Web Query for testing purposes
- You heard about a Query/400 Discovery tool or Graphical System Administration reports available with DB2 Web Query

You Want the EASY BUTTON

Introducing the DB2 Web Query EZ-Install Package – The EASY Button

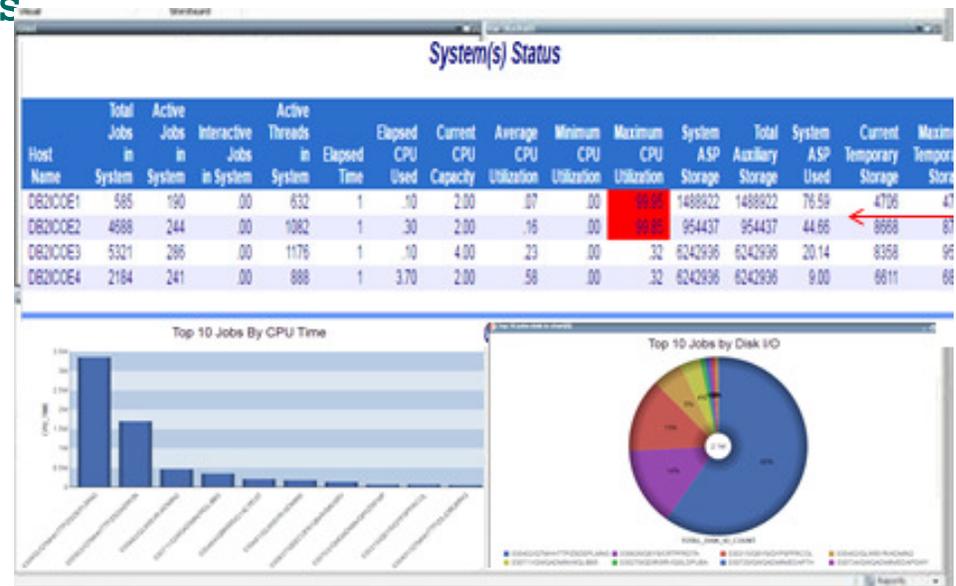
- An EASILY acquired, EASILY installed package of [trial](#) code...and more
 - A single downloadable image that you can request that includes:
 - DB2 Web Query Version 2.2 ([LATEST Group PTF Already Installed](#))
 - Express and Standard Editions (job scheduling. Non DB2 database access)
 - Optionally install Data Migrator ETL and/or Developer Workbench
 - Sample Reports for the System Administrator
 - DB2 Web Query Auditing/Monitoring Reports
 - Query/400 Discovery Tool
 - Everything set up ready to run 14 chapters of self guided report writing tutorials
 - (we also include all the completed tutorial reports)
 - Requirements
 - 7.1 and up (7.2 or 7.3 preferred for the System Administrator reports)
 - 70 Day Trial Period. Apply License Keys to get permanent usage



2.2 in less
Than 2 hours!

Sample System Administration Reports

- Built over IBM i SQL Services
 - Best to be at 7.2 or up
- Utilization and/or Top xx in nature
- Can use out of the box or edit/add using these as samples
- System Utilization across multiple LPARs
 - Auto Refresh
- Top Jobs by CPU or I/O or Temp Storage
- PTF Currency Report



Subsystem Summary

SUBSYSTEM	NUMBER_OF_JOBS	TOTAL_CPU_TIME	TOTAL_TEMP_STORAGE	TOTAL_IO
ZENDSVR6	12	4567124	131	1132536
QHTTSPVR	9	658886	1531	131819
QWEBQRY21	31	441511	3491	123630
QSYSWRK	111	264937	1129	460375
Q1ABRMNET	3	187372	124	3676
QUSRWRK	31	32036	285	16378
QSERVER	21	413	84	4647
QINTER	1	180	5	342
QCMN	8	39	15	427
QCTL	1	10	2	669
QSPL	1	8	2	122
QBATCH	1	6	2	126

PTF Currency Report

Status	PTF Group ID	PTF Name	Installed Level	Level Available	Date of last IBM Update
CURRENT	SF99384	710 WebSphere App Server V8.1	9	9	02/02/2013
	SF99480	720 WebSphere App Server V8.0	6	6	02/01/2016
	SF99637	710 DB2 Web Query for IBM i V1.1.2	9	9	12/12/2013
	SF99747	720 DB2 Web Query for i V2.1.0	14	14	03/30/2016
	SF99766	720 Print PTFs	3	3	01/07/2015
	SF99145	710 Performance Tools	9	11	05/17/2016
	SF99363	710 WebSphere App Server V7.0	16	19	04/11/2016
	SF99366	710 Print PTFs	8	12	01/07/2015
	SF99368	710 IBM HTTP Server for i	37	42	07/01/2016
	SF99369	710 IBM i Integration with BladeCenter and System x	13	16	12/19/2014
UPDATE AVAILABLE	SF99380	710 WebSphere App Server V8.0	11	15	02/01/2016
	SF99381	710 WebSphere App Server V8.5	10	16	08/14/2016
	SF99481	720 WebSphere App Server V8.5	8	9	08/14/2016
	SF99647	710 DB2 Web Query for i V2.1.0	13	14	03/30/2016
	SF99658	720 DB2 Web Query for i V2.1.1	2	3	03/30/2016
	SF99701	710 DB2 for IBM i	38	40	04/28/2016
	SF99702	720 DB2 for IBM i	12	13	07/14/2016
	SF99710	Current Cumulative PTF Media Documentation	14263	16120	05/19/2016
	SF99713	720 IBM HTTP Server for i	15	16	07/01/2016
	SF99714	720 Performance Tools	2	4	05/17/2016
SF99716	720 Java	9	10	06/11/2016	
SF99717	720 Technology Refresh	3	4	05/19/2016	
SF99718	720 Group Security	29	36	08/09/2016	
SF99719	720 Group Hiper	60	71	06/23/2016	
SF99720	Current Cumulative PTF Media Documentation	15311	16127	05/20/2016	
SF99767	720 T20 TCP/IP PTF	2	3	06/25/2016	
SF99775	720 Hardware and Related PTFs	14	17	04/25/2016	
SF99776	720 High Availability for IBM i	3	5	07/22/2016	

DB2 Web Query Auditing Reports

- Pre-built reports that answer these kinds of questions about DB2 Web Query Reporting Environment
 - Who is running the most reports?
 - Which reports are being run the most?
 - Which reports are taking the longest time to run?
 - How many reports are in each folder?
 - When was a report last used?
 - When was a report last modified?
- Initial summary dashboard with additional detailed reports behind it



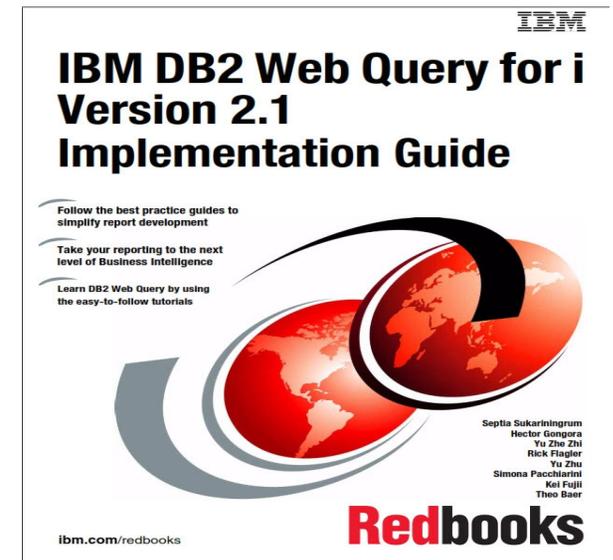
Try It and Buy It

- Point customers to db2webqueryi.blogspot.com for more information
- To request the package, send email to QU2@us.ibm.com
 - Include:
 - Name
 - Company Name
 - Serial Number of system where this will be installed



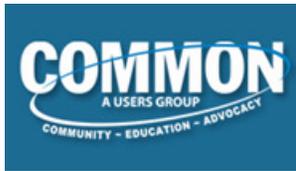
NEW Redbook(s)

- DRAFT MODE
- Updated 14 Chapters of Tutorials – With EZ-Install you can start immediately
 - <http://www.redbooks.ibm.com/abstracts/sg248378.html?Open>
- Nuts and Bolts of DB2 Web Query
 - Covers Topics such as
 - Accessing non DB2 Data Sources
 - Building Data Warehouses with DataMigrator
 - Geographical Mapping
 -and more
 - <http://www.redbooks.ibm.com/abstracts/sg248379.html?Open>





IBM i has an Active, Passionate Community



IBM i Customer Input

COMMON (CAAC)

Large Users Group

COMMON Europe

ISV Advisory Council



实验室之旅

ISV Interlocked Development



Customer Briefings & Planning Sessions

Top IBM i Client Projects



New Insights from Business Data

HA/DR



Cloud infrastructure

**Modern technology
for existing solutions**

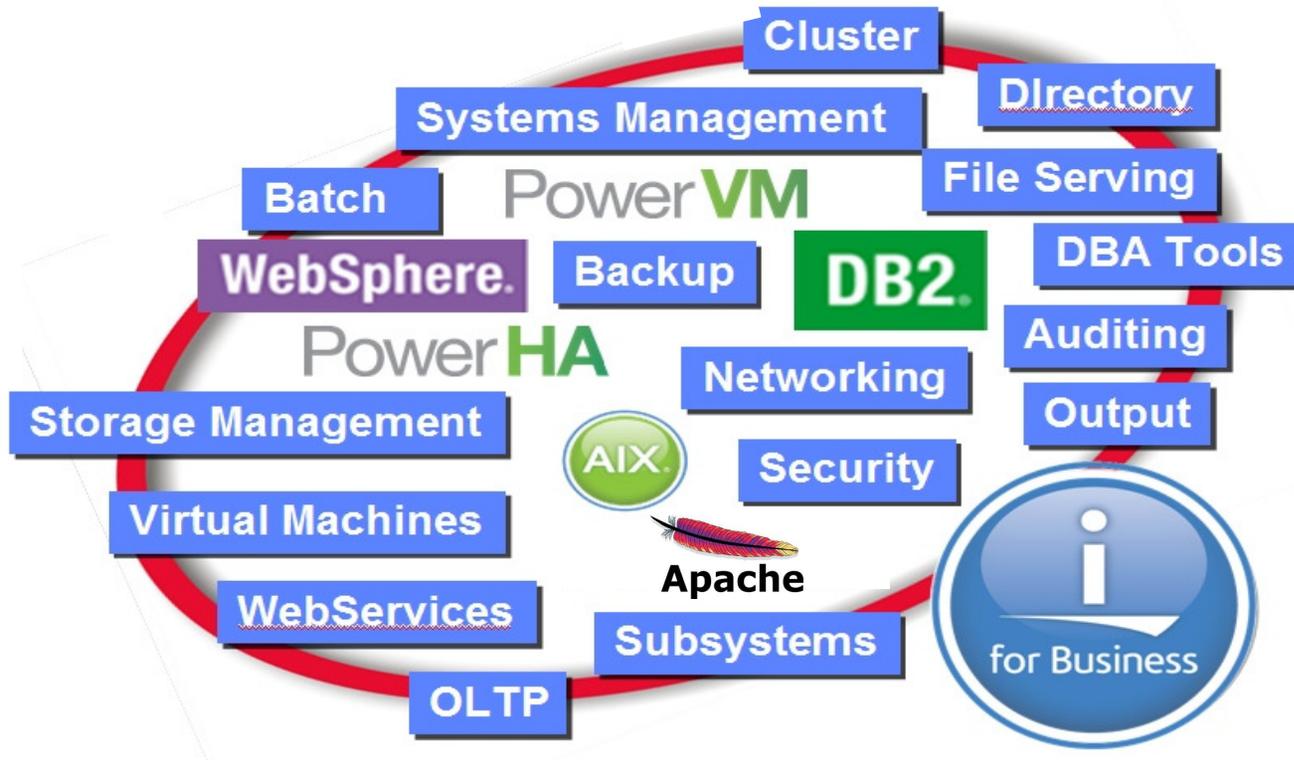


**Security in Mobile,
Cloud, Shared**

**Exploit
Storage**



IBM i is a Solution Platform



Operating system and middleware components are designed, developed, built, tested, delivered and supported as one

IBM i Priorities

- **Solutions for Today and the Future**
 - Focus on solutions integration with new technology
 - Invest in DB2 and language features for strategic solutions
 - Enable Mobile Device Support
- **Systems On-Site or In the Cloud**
 - Exploit future POWER system technology
 - Deliver advanced virtualization of system & storage
 - Provide resiliency, availability & flexibility
- **Simple & Integrated, Secure & Available**
 - Simplify management of systems and high availability
 - Broaden storage area network integration
 - Extend industry-leading integrated security



IBM i Solution Providers



Enabling solutions for business

IBM i Systems of Record







IBM i Systems of Engagement



IBM i and “the Cloud”



IBM i & Partners - Changing the View; Changing the Business



IBM i Application Languages Strategy

- RPG is the most commonly used language on IBM i so
 - Enable RPG as a powerful, modern procedural language
 - Partner for tools which transform older RPG to modern RPG
 - Work with partners & schools to teach RPG to non-RPG developers quickly
- Extensive skills and catalogs of solutions exist for business in other languages
 - Support key industry languages and programming models on IBM i
 - Ensure those new approaches can integrate with existing IBM i solutions
 - Enable tools for development, debug, lifecycle – from IBM and from partners

RPG



IBM i: Enabling solutions for your business

IBM i Native Solutions



A grid of logos for various IBM i Native Solutions, including SAP, infor, SYNTAX, IBS, fiserv, Agilysys, DPS, COMPUTER GUIDANCE CORPORATION, Friedman Corporation, DST, PFW, HARRISDATA, LWSI, solarsoft, Retailix, rippe&kingston, N2N, SOFTWARE CONCEPTS, vai, TMM SYSTEMS, ORACLE, jda, DMS, Xperia, Jack Henry & Associates Inc., SDS, and HMS.

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Open Source on IBM i



A grid of logos for open source software running on IBM i, including Mantis, mambo, XOOPS, zen cart, MediciWiki, dojo, Drupal, WORDPRESS, FOCUS School Software, phpbbs, Joomla!, Magento, and SUGARCRM.

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IBM i: Enabling solutions for your business

IBM i Native Solutions



Open Source on IBM i



Linux Solutions



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PASE



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Popular – Client Stories 2015-2016

100+ References

IBM | Powerful Solutions for Mid-market Companies

EASI

- EASI – an IBM Premier Business Partner
 - Headquartered in Belgium, also active in Luxembourg and France
 - Providing business solutions and services to mid-market companies since 1999
- Over 700 clients across multiple industries
- Efficient, fully integrated business solutions for IBM
- IBM Lotus Notes/Domino specialty

Power your planet.

IBM | Delivering Competitive Advantage

FedEx

This stability, TCO and speed of development convinced us we should not only maintain our mid-range environment, but expand it to lead it at the center of our operations for the long term. IBM has enabled us to grow the scale of our environment, while at the same time become more nimble and resilient.

Ken Spangler, VP of IT

Anthony Squires employs mobile technology as cutting edge as the suits they sell

16% increase in sales in the first 6 months

Gain competitive advantage with ability to check stock and transfer garments from store to store while customer waits. Fewer queries being directed to HQ means improved productivity at HQ and at the stores.

Clothing retailer Ermenegildo Zegna Group uses behavioral analytics to improve customer relationships across channels

23% Increase in sales as a result of bringing online shoppers into retail stores

Valuable insight into which marketing campaigns and sales channels are most effective, and with whom

Seamless flow of merchandise from channel to channel

Business challenge: Genoa-based Ermenegildo Zegna Group is an independent luxury goods manufacturer. The company wanted to bring their online and retail sales channels together to gain insight into their behavior as they moved from channel to channel.

The solution: Behavioral Analytics from the mobile-optimized behavioral analytics tool of the IBM Watson Analytics suite – everything from which items are most popular to which items are most popular to their online customers – and then uses the insight to create a personalized experience for each customer. Based on our findings, we can offer incentives to encourage customers to visit our stores and their mobile device opportunities for cross-selling.

Stefano Motta, head of e-commerce department

INEOS O&P USA – Cutting operational SAP costs by 20 percent in the cloud

20 percent cut in total cost of ownership for the SAP operations

Continued improvement in "Dotted Order" metrics

Increased system flexibility, scalability and resilience

Solution components

- IBM Cloud Managed Services for SAP Operations
- IBM Cloud Managed Services for SAP Business Applications
- IBM Cloud Managed Services for SAP Business Services
- IBM Cloud Managed Services for SAP Business Technology

Resilient infrastructure frees resources to focus on the business not Technology

The transformation: INEOS O&P USA wanted to simplify and increase the resiliency of its SAP operations to increase sales.

OSTNOR

The leading manufacturer of faucets, fittings and accessories in the Nordics

800 employees, €100 million

SIAS boosts profits and speeds deployments from four weeks to one hour

Significantly speeds time to market from four weeks to one hour

Saves time and reduces total cost of ownership (TCO) as a result of a single platform with a streamlined management console

Increases cloud solutions and moves managed service provider business toward Platform as a Service (PaaS) solution

"The PureFlex platform is sustainable because we can get higher-margin business. As an MSP we can use this easy managed system to grow a customer unit we become their full IT solutions provider. I really love the IBM PureFlex platform."

— Matt Gross, managing director group, Secure Infrastructure & Services

Business Challenge: Secure Infrastructure & Services (SIS) administers various platform-based applications and services for IBM clients. The company sought an integrated cloud solution that could help manage its IT infrastructure.

Baker Corporation saves, satisfies, solves

300 hours saved per month across 175 users

Users and customers include the new application

"The users are not only saving they love using the new application"

Challenge: Provide field staff with easy access information about equipment, customer inventory

Improve efficiency and customer experience

Every user SAV

Customers are deploying infrastructure

"With the real-time insights enabled by Cognos software, we're better able to translate our fashion market savvy into smart practices at every level of our business."

— Nihad Arjman, Director of Business Applications, Elie Tahari

30% reduction in supply chain and logistics costs

5 platforms integrated into a single reporting framework

Dawn Meats – Building a scalable, environment sustainable architecture to support a growing business

EUR 200,000 saved by unifying IBM and Windows/Intel servers with a single SAN

75% performance boost for Microsoft workloads

ROI within 18 months and 50% extra capacity to support future business growth

The transformation: Dawn Meats' Microsoft ERP landscape was running out of capacity – a challenge to its plans for significant long-term business growth. By undertaking a total transformation of its core infrastructure, Dawn Meats now has the headroom to support future expansion.

Performance has improved across the board, and the productivity gains will be enormous.

— Shane Slattery, CIO, Dawn Meats

Solution components

- Hardware
- IBM Power 720
- IBM System x3 950 344
- Software
- Microsoft
- IBM Business Partner
- IBM Business Partner
- IBM Business Partner

Management Report

TCO 50% lower

<http://bit.ly/IBMiTCO> ITGMidsize

Reliability 5-10x
higher

<http://bit.ly/IBMi> ITGEnterprise

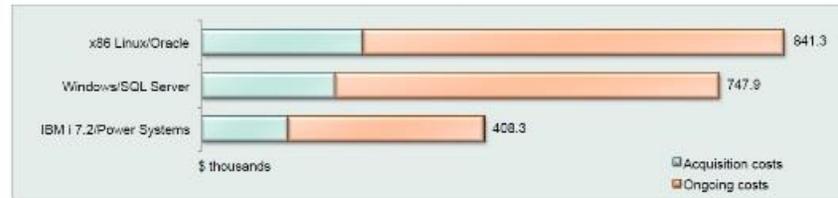


Figure 2: Three-year Acquisition and Ongoing Costs by Platform – Averages for All Installations

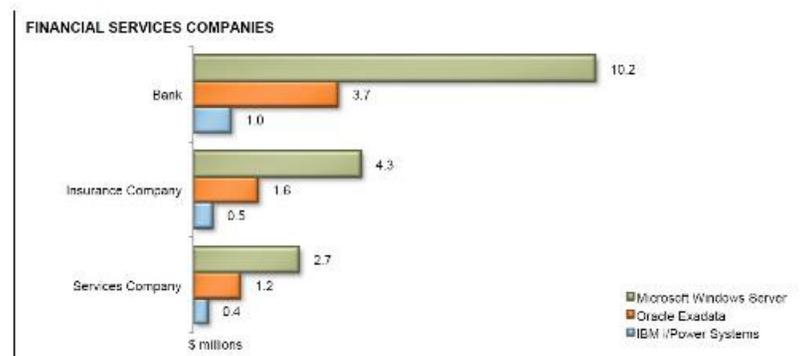


Figure 4: Three-year Costs of Downtime by Platform – Financial Services Companies

Solutions

Integration

Value

Future





ithankyou

