





for z/OS

Thiru Thirupuvanam

TPF Software Inc.

March 10th 9:30 am & March 13th 11 am







# Agenda

**Introducing TPF Software** 

New z/OS Product Line

zSAT - System Analysis Tool

zDVI – Dump Viewer

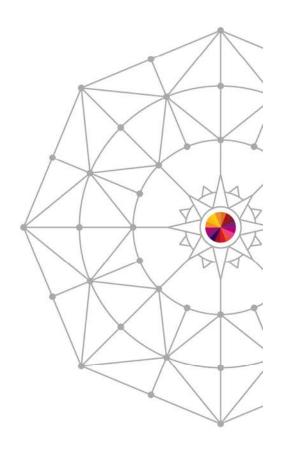
zIDE Pro – Development Environment





# Introducing

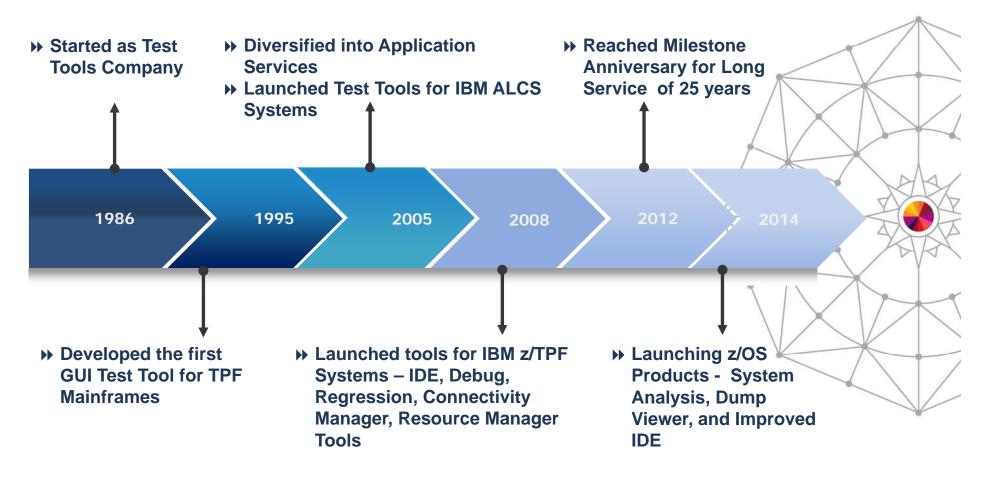








# **Company History**







# **Product Portfolio**

Product	Description	
zTPFGI	A Comprehensive Test Management System for coding, testing, debugging, analyzing and fine-tuning your z/TPF applications	/
zIDE	An legacy–friendly development and management tool for z/OS applications	
zTTFS	Provides Virtual Connectivity to remote resources for z/TPF	/
zRTF	Offers advanced Regression Testing abilities for z/TPF	,
zQDC	A quality assurance tool for managing and controlling quality assurance testing scripts	Y
ALCS/GI	A debug tool for ALCS applications	K
DF Explorer	Easy-to-use graphical interface, which simplifies the online maintenance of the TPFDF files.	_
CMSTPF	An advanced testing system for TPF application programs	
TPF/IDE	An integrated development environment for TPF applications	
TPF/GI	A debug tool for TPF applications	1
CTFS	Provides virtual connectivity to remote resources for CMSTPF	
RTF	Provides advanced regression testing for TPF	



# **Industry Verticals**

#### • Industries:

- Travel (Airlines, GDS, and Railways)
- Hospitality (Hotels)
- Banking (Credit Card)

#### Our Business Solutions include:

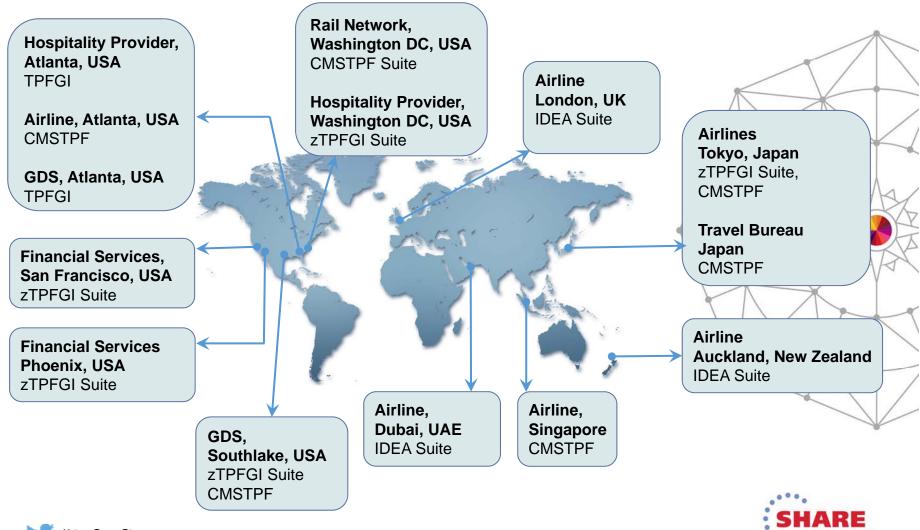
- Comprehensive tools for zEnterprise community
- Application Services
- System Services
- Migration
- Training





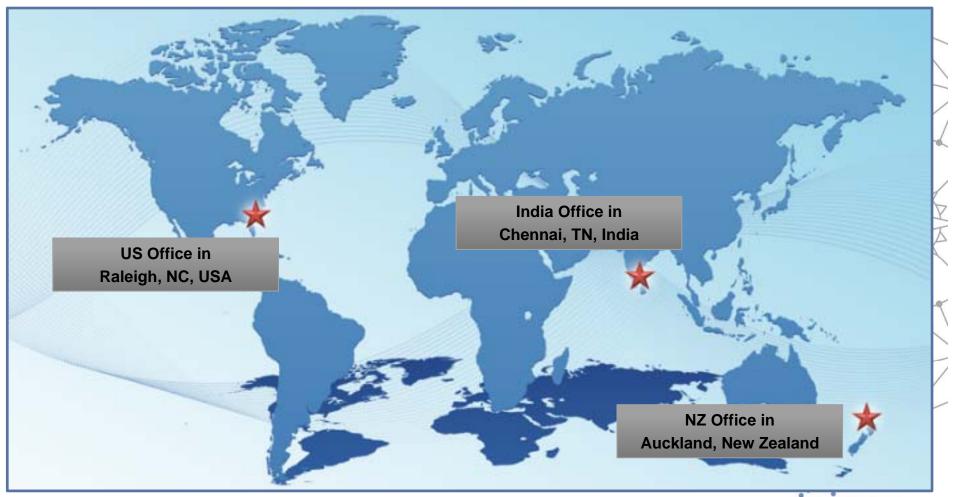


### **Geographical Locations of Customers**





#### **Our Office Locations**







# TPF Software Launches z/OS Product Line...







# zSAT (System Analysis Tool)

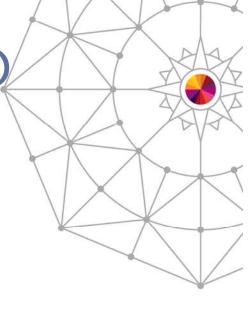
Intuitive, Easy to Use, Web-Based GUI

 Collect, Analyze, Compare & Report z/OS System. **Information** 

Export/Print Reports
 System Analysis Tool)
 System Health Indicators

**Dashboard for Critical Information** 

Email Alerts









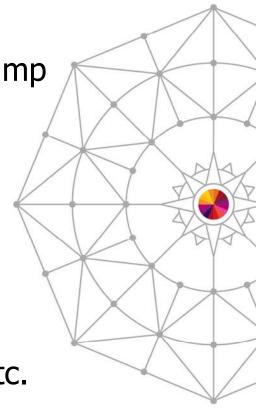
### zDVI (Dump Viewer)

Intuitive, Easy to Use, Web-Based GUI

 Collect, Analyze, Compare & Report z/OS Dump Information

Great for the Novice

- No need to know long commands
- Quick access to dump details
- Great for the More Experienced
  - Built-in Command Interface
- Single-click access to control block listings etc.

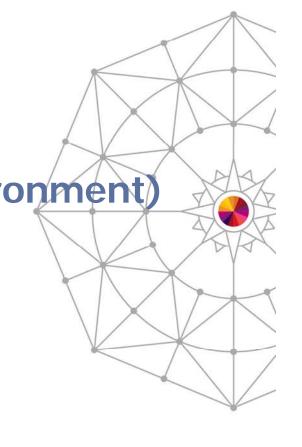






### zIDE Pro (Development Environment)

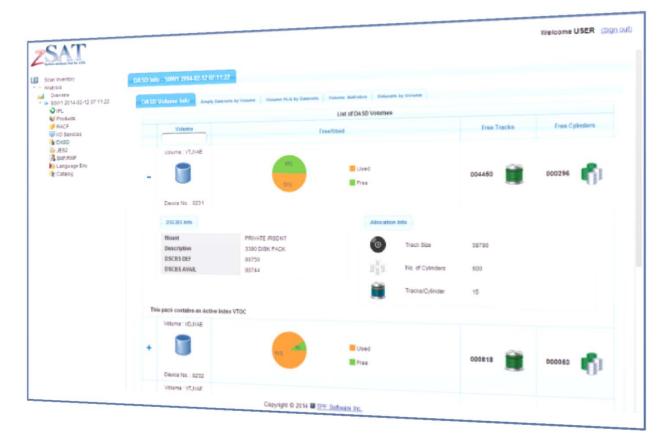
- Intuitive, Easy to Use
- Legacy-Friendly
- **GUI** with Ribbon Menu
- Manage Files
   ZIDE Pro (Development Environment)
   Linux Files, PC Files, USS Files, JES Files
  - Move files across systems
- Edit, Compile/Build & Load to System

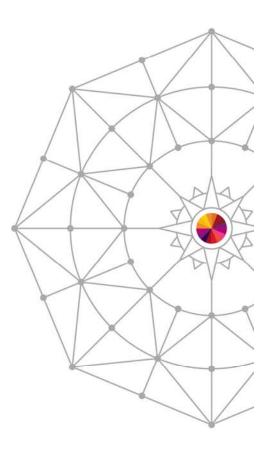






# zSAT Overview (System Analysis Tool for z/OS)





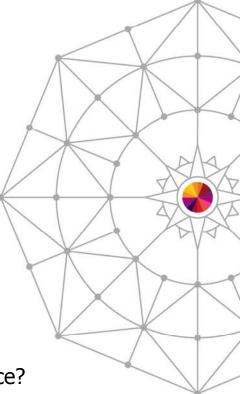




# System Analysis: The Challenges

- Finding the basic system information is like a maze
  - Device Channels installed and online
  - System Information (Model, Processor, Memory, CPU capacity)
  - System parameters during IPL
  - Parameter Configuration information
  - List of Empty datasets
  - How can I compare the past and present system states or checkpoints?
  - How do I save my analysis time?
  - How many DASDs are online? DASD's most used/least used
  - When was the last IPL done?
  - Where do backups of RACF Profiles reside?
  - How do I get automated email alerts for system issues in advance?
  - How do I generate audit reports?

And so on...







# System Analysis: The Challenges

- Retrieving and logging system information is time consuming
- Using the available information to make better decisions is not easy
- Comparing system information and generating reports from different logs takes a long time



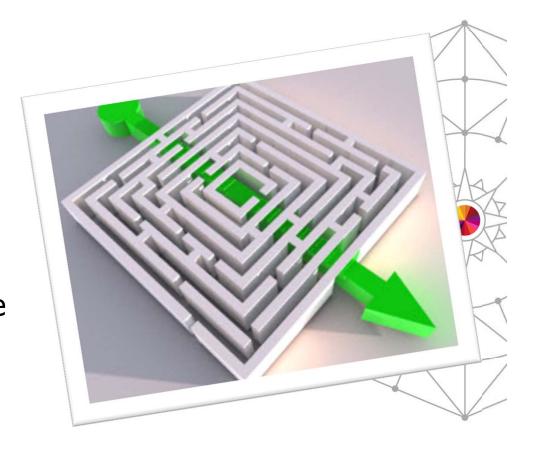






#### The Solution: zSAT

- Point-in-time captures
- Provides easy accessibility to critical areas of the z/OS system
- Simplifies interpretation of complex z/OS control blocks and data areas
- Caters for various zEnterprise Professionals z/OS Programmers, Managers, Auditors and Operators







#### The Solution: zSAT

The D M=CPU command displays information about each processor.

D M=CPU
IEE174I 10.15.48 DISPLAY M 307
PROCESSOR STATUS

ID CPU SERIAL
00 + 016B152817

CPC ND = 002817.M49.IBM.02.00000000C6B15
CPC SI = 2817.730.IBM.02.0000000000C6B15
Model: M49
CPC ID = 00

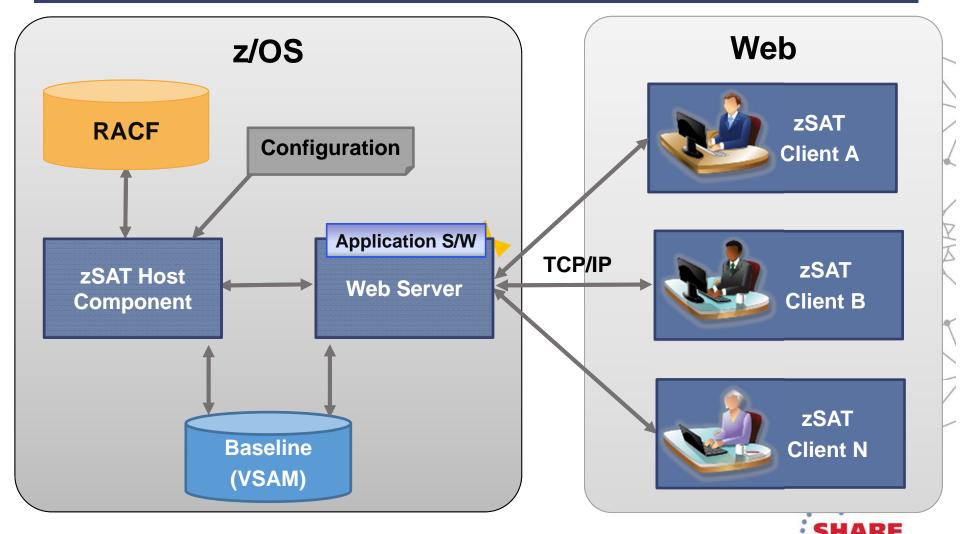


 Hidden in this output is the model number: in this case 2817.730 (z196).





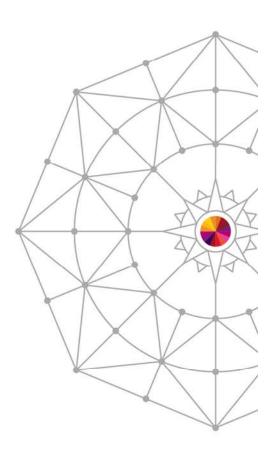
#### **zSAT Architecture**





#### **zSAT Architecture**

- Uses a 3-tier Architecture Model, and comprises of the following components.
  - Host zSAT's nucleus. Includes supporting services to collect system data based on user configurations.
  - Web Server Handles information requests and presents data graphically.
  - Client No Client need be installed.
     Compatible with any web browser on any smart device.
- RACF used for all security



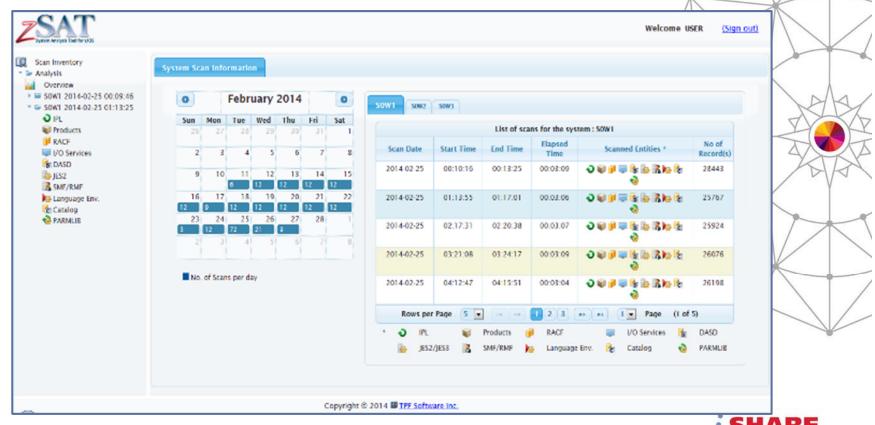


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#### **Graphical User Interface**

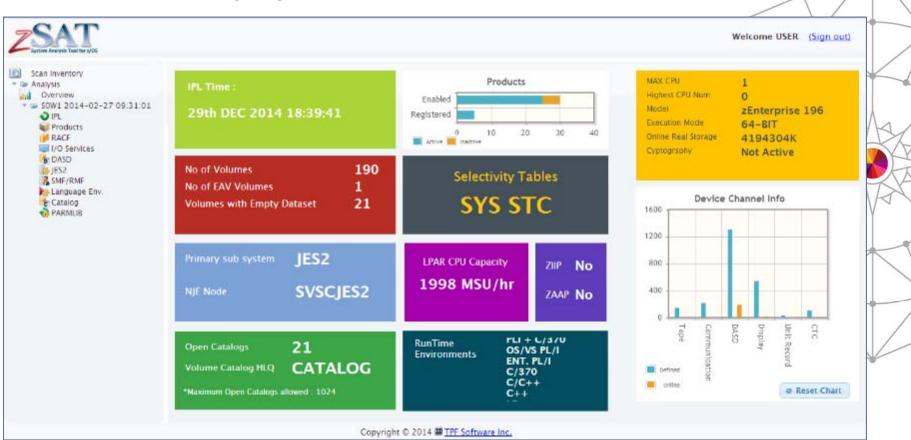
Intuitive and easy-to-use GUI system analysis tool for zEnterprise professionals





#### **Dashboard**

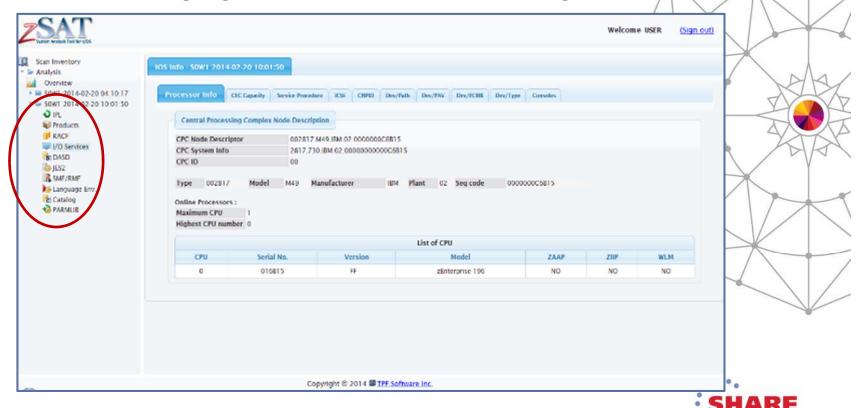
Dashboard displays critical information





#### **System Information Collection**

 Facilitates z/OS System information collection e.g. RACF Details, IPL Parameters, PARMLIB Details, JES2/3, Configuration, DASD Volume Info, CATALOG View, Language Environment, SMF/RMF configurations





# **System Information Collection**

System Areas	What it Contains	/
RACF – Resource Access Control Facility	Information about RACF DB such as the volume it resides, buffer allocated Etc.	
IPL Information	Parameters used to initialize system (SYSn.IPLPARM)	
Product Information	List of IBM products installed in the shop.	_
LE – Language Environment	Information about the library that provides runtime services to HLLs	<
SMF – System Management Facility	System routines and optional user-written exit routines collect, format, and record system and job- related information	
RMF – Resource Management Facility	Active record details	K
PARMLIB	Information about the PARMLIB Datasets and volume serial numbers that are defined in LOADxx	
JES2/JES3 – Job Entry Subsystem	Information about jobs being handled by the system	
DASD Volumes	Information about DASDs connected to the system	-
IOS Info / UCB	Information about the I/O configuration and Unit Control Blocks	1
CATALOG View	Manages data set attributes and indicates the volume on which a data set is located	





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### **Capture and Compare**

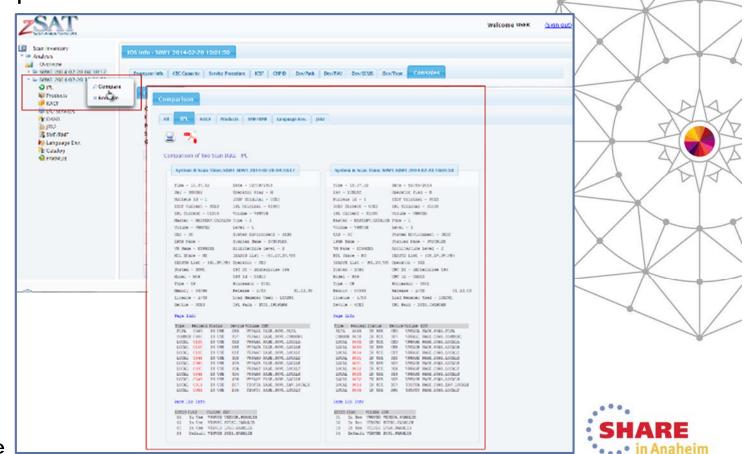
Capture and compare different system scans





#### **Quick Error Detection**

 Allows quick error detection with comparison view of past and current system checkpoints

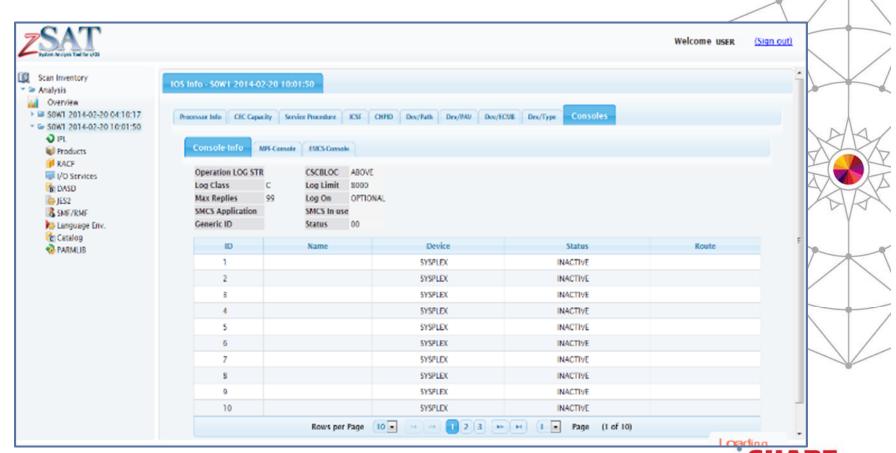


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### **Easy Navigation and Visualization**

Easy navigation and visualization of vital system details

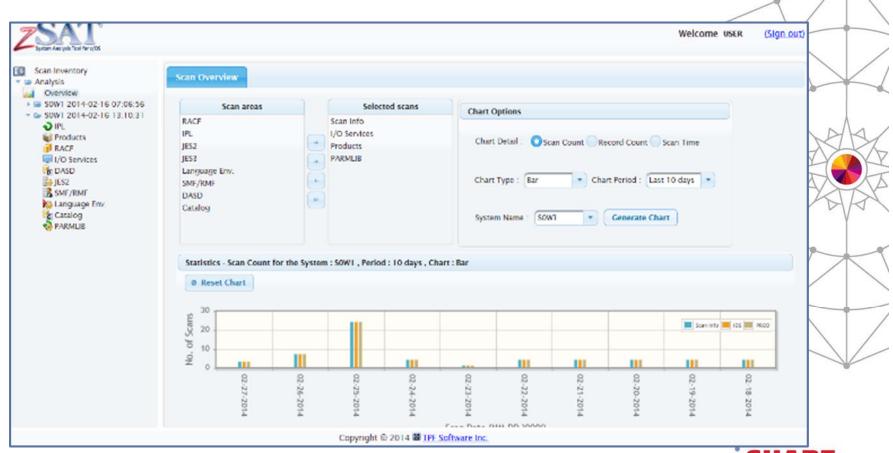


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### **Generate Reports**

Generate reports for Audits and Management

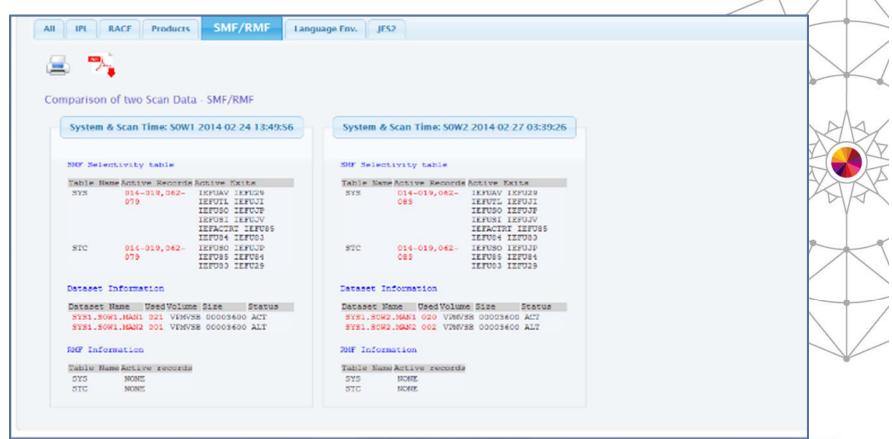


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# **Print / Export**

Options to print or export the compared results





# **PDF Output of Comparison Results**

#### Comparison Of Two SMF/RMF Data - S0W1 2014-02-24 13:49:56 & S0W2 2014-02-27 03:39:26

Client Logo

S0W1 2014-02-24 13:49:56	S0W2 2014-02-27 03:39:26  SMF Selectivity table	
SMF Selectivity table		
Table Name Active Records Active Exits	Table Name Active Records Active Exits	
SYS 014-019,062-079 IEFUJV IEFUSI IEFUJV IEFACTRT IEFUSS IEFU84 IEFU83	SYS 014-019,062-083 IEFUJV IEFUSI IEFUJV IEFACTRT IEFU85 IEFU84 IEFU83	
STC 014-019,062-079 IEFUSO IEFUS IEFUS IEFUS IEFUS IEFUS IEFUS IEFUS	STC 014-019,062-083 IEFUSO IEFUJP IEFU85 IEFU84 IEFU83 IEFU29	
Dataset Information	Dataset Information	
Dataset Name UsedVolume Size Status	Dataset Name Used Volume Size Status	
SYS1.SOW1.MAN1 021 VPMVSB 00003600 ACT	SYS1.SOW2.MAN1 020 VPMVSB 00003600 ACT	
SYS1.SOW1.MAN2 001 VPMVSB 00003600 ALT	SYS1.SOW2.MAN2 002 VPMVSB 00003600 ALT	
RMF Information	RMF Information	
Table NameActive records	Table NameActive records	
SYS NONE	SYS NONE	
STC NONE	STC NONE	



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#### **DASD List View**

Provides graphical display of Least Used and Over-Used system details



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#### **Control Blocks and Data Areas**

 Allows simple interpretation of complex z/OS control blocks and data areas





# **Key Benefits of zSAT**

Saves analysis time and effort

 Facilitates easy configuration, without requiring additional client software

 Effective and Efficient navigation and representation of vital system details

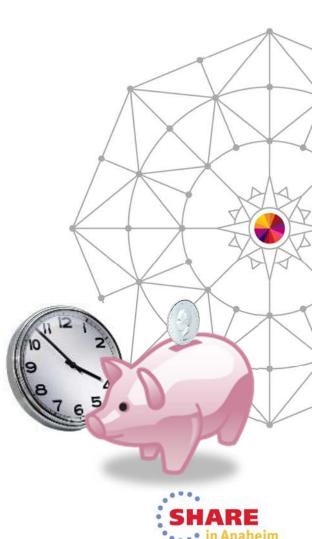
Compatible with any smart devices





# **Key Benefits of zSAT**

- Enhanced Comparison Views
- Powerful Graphical Reporting
- System Health indicators
- Dashboard for critical information
- Generate alerts
- User customizable exits

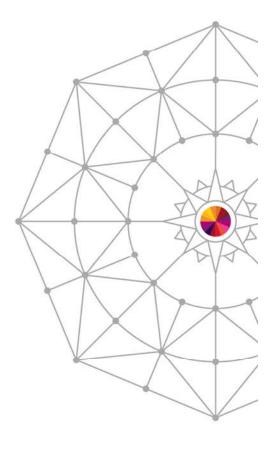






#### And More...

- Provision for monitoring facility
- TCP/IP and FTP Details
- Unix System Services Info
- WLM, ENQ
- More CBs and Statistics







#### Prerequisites/Installation





- IE 9 or above
- Firefox 21 or above
- Chrome 27 or above
- Safari 4 or above
- Minimum 2GB RAM







- RACF rules need to be defined
- TCP/IP port
- Startup procedure (JCL)
- FTP server
- Web Server







# **Any Questions**



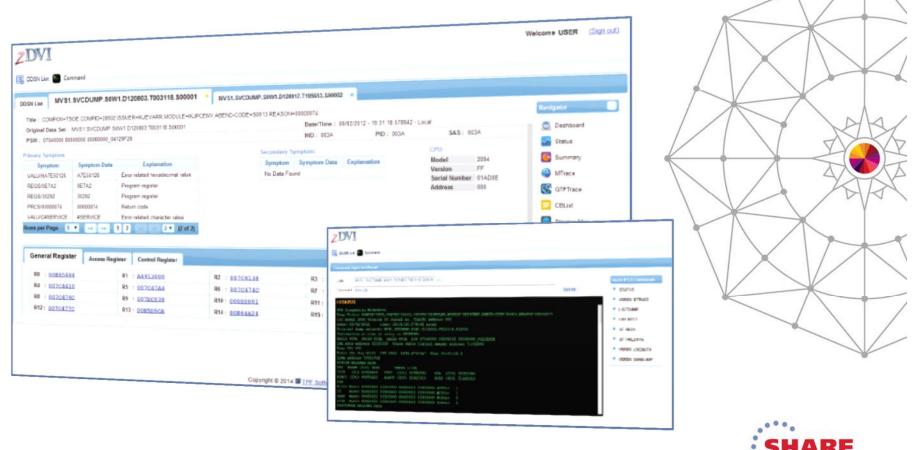
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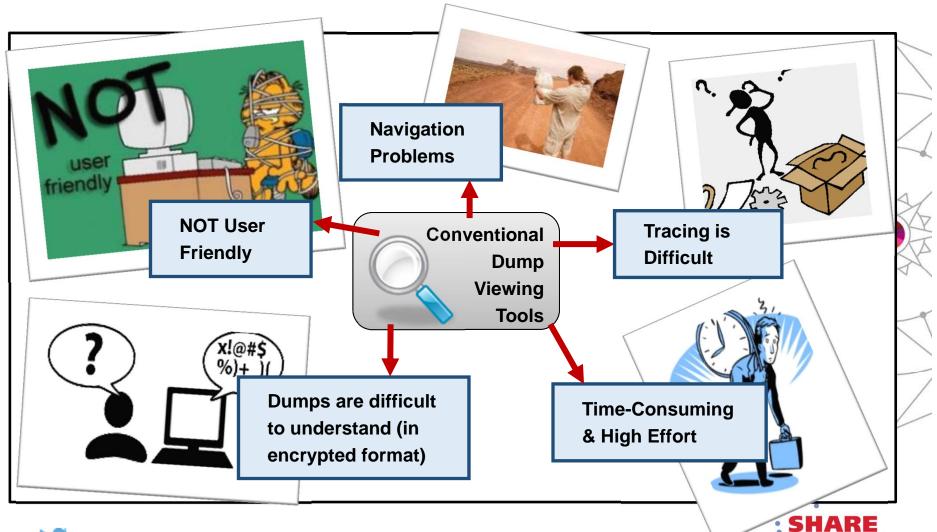
# zDVI Overview (z/OS Dump Viewer)



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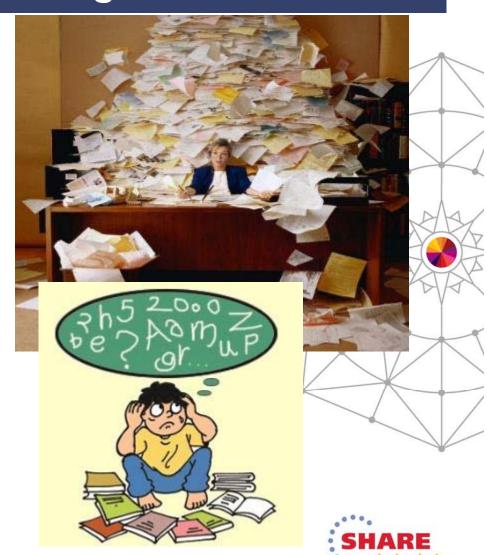
# **Dump Analysis: The Challenges**





### **Dump Analysis: The Challenges**

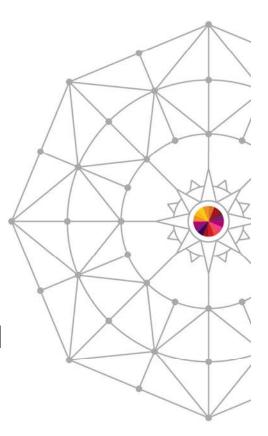
- Most of the existing dump viewing tools are menudriven utilities
- No easy access to dump information or critical areas of z/OS System for analysis
- User has to memorize lengthy commands and sub commands





### **Dump Analysis: The Challenges**

- Conventional Dump Viewing Tools
  - Difficult to navigate
  - Difficult to trace
  - Time consuming and large effort
  - Difficult to understand encrypted dumps
  - Not user friendly
  - Menu-driven
  - No easy access to dump information or critical areas of z/OS System for analysis
  - User has to memorize lengthy commands and sub commands







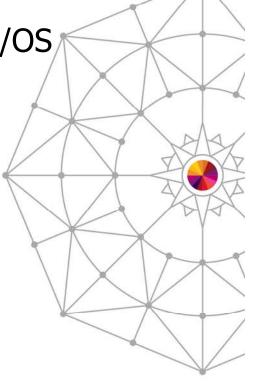
### The Solution: zDVI

Dump Viewer for z/OS

Intuitive, simple-to-use, web-based GUI for z/OS programmers

Allows quick dump analysis

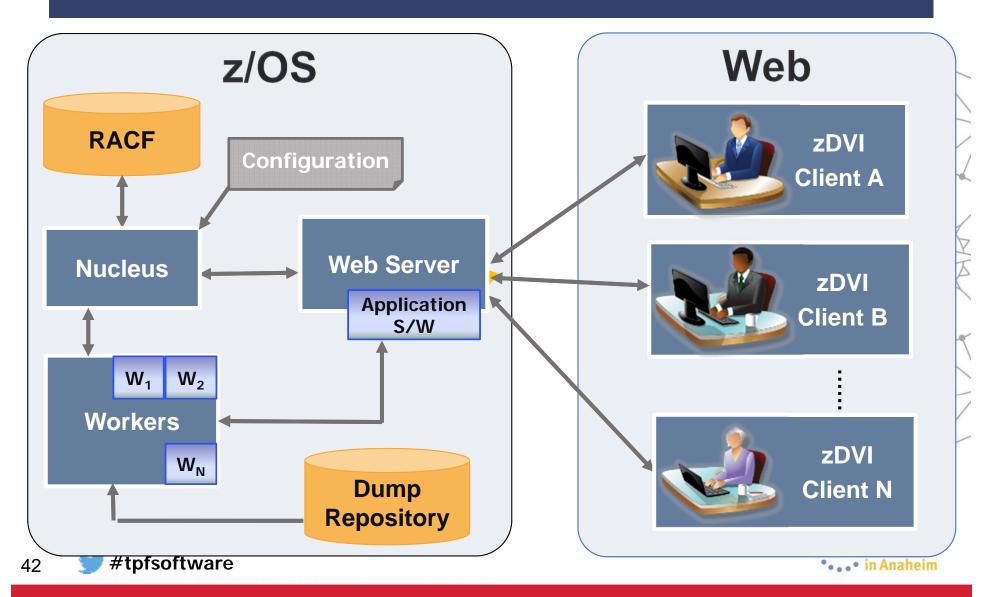
- Easy navigation to move through the dump
- Easy access to critical dump information
- Logical organization of dump information
- Multiple dump browsing capabilities







### **zDVI** Architecture





# **Graphical User Interface**

Comprehensive, simple-to-use GUI dump analysis tool for z/OS programmers

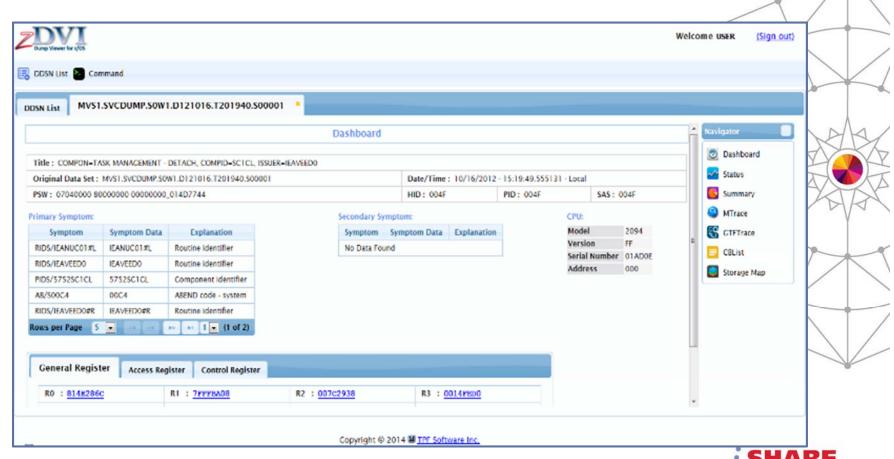


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# **Easy-to-Read Snapshots**

Provides easy-to-read dump snapshots

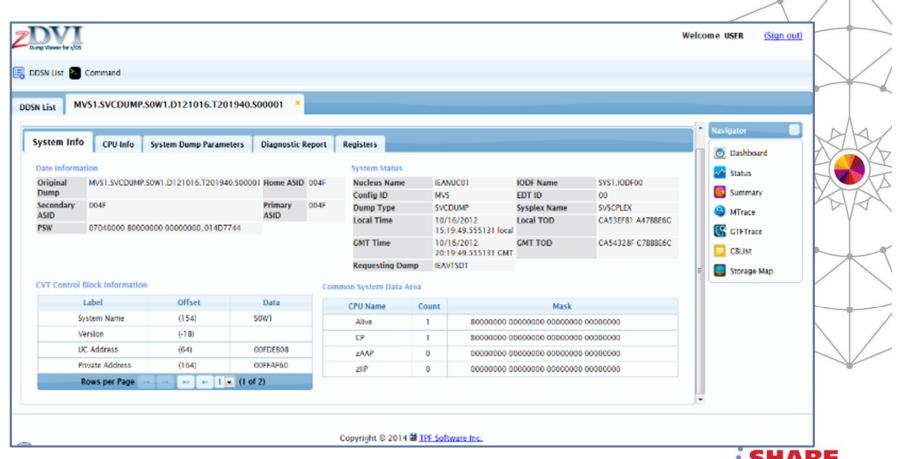


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# **Logical Group Displays**

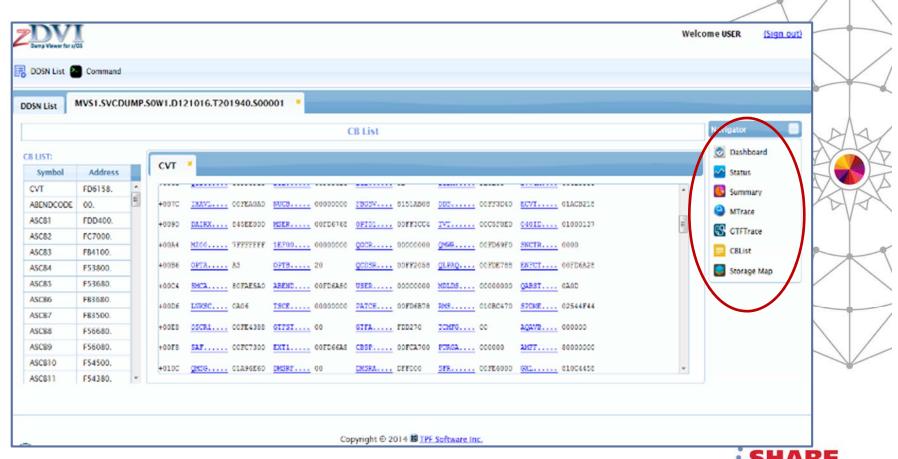
Logical group display of dump data





# **Easy Navigation**

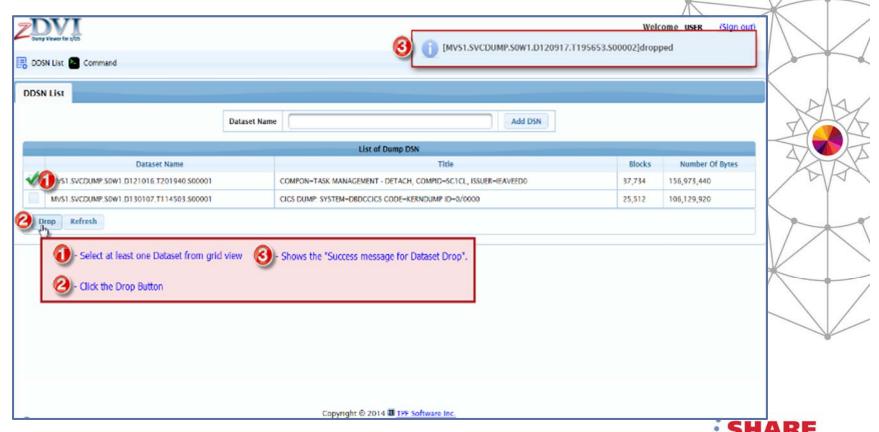
Quick access to critical dump information





### Add, Browse, Delete DSN Index

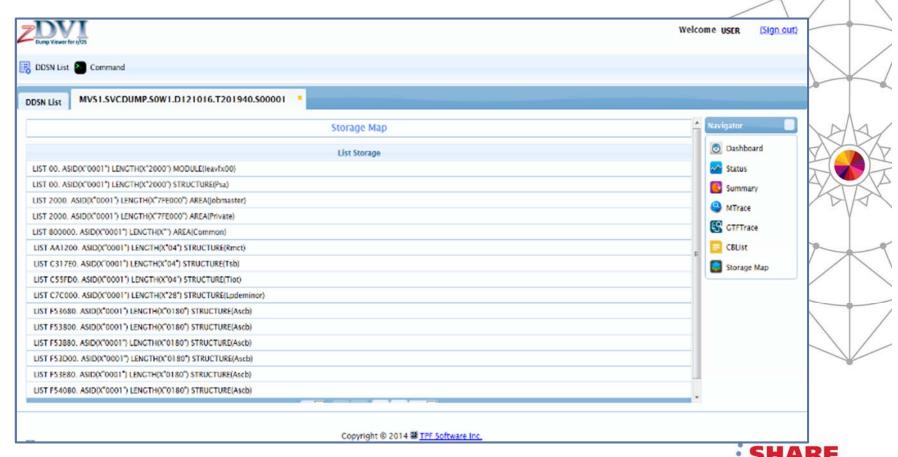
 Allows management of dump DSN index using simple Add, Browse & Delete functions





# Storage Maps

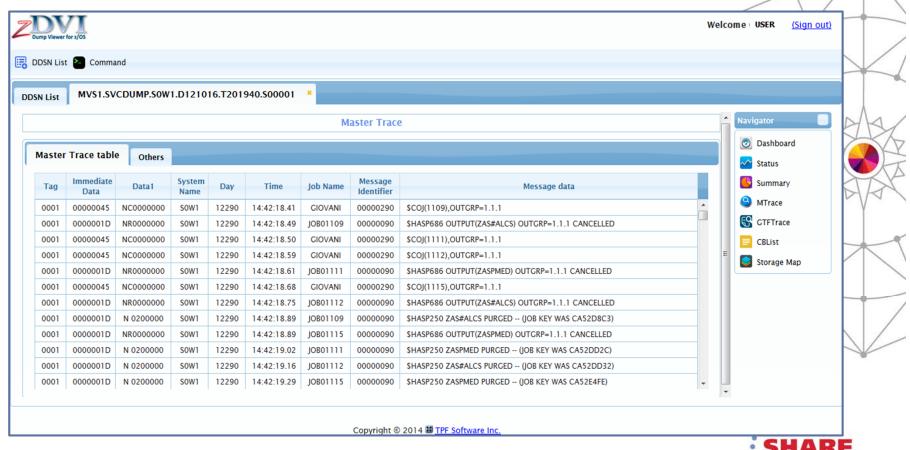
Displays Address Spaces, Core Blocks, Dump Storage and so on





# **Categorized of Trace Data**

Easy to read traces because the data is categorized in tabs

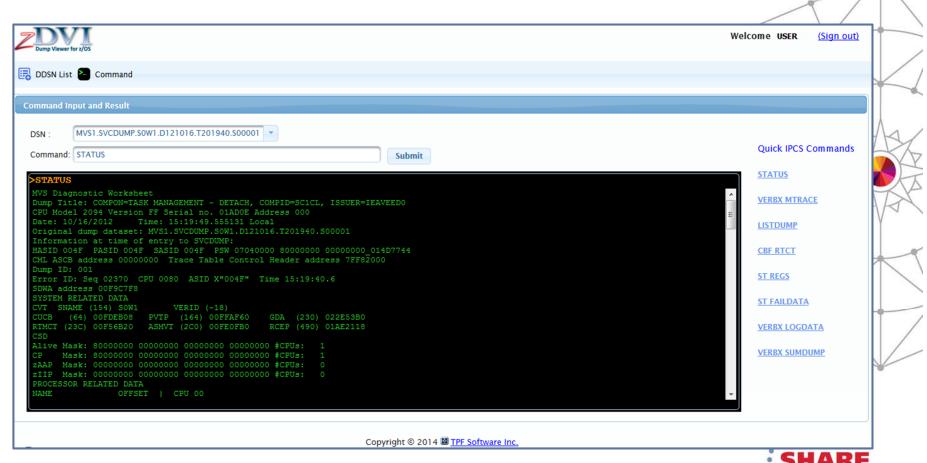


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### **Command Interface**

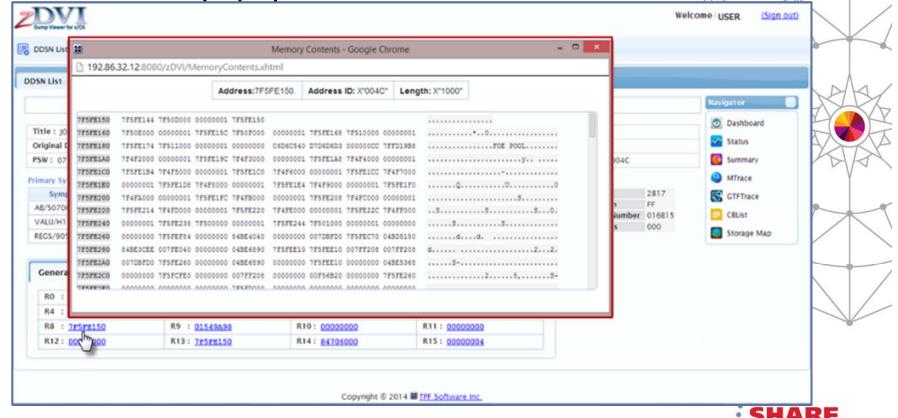
Built-in Command Interface





### **Memory Contents View**

Double-click memory address to view the memory contents in a popup window





# **Key Benefits of zDVI**

- Save analysis time and effort, resulting in significant cost-savings and enhanced productivity
- Provide easy accessibility to critical dump information
- Comprehensive Report Generation for Dump Information
- Easy To Install, Configure and Maintain
- User-friendly interface for both experienced and novice users
- Minimizes CPU Utilization

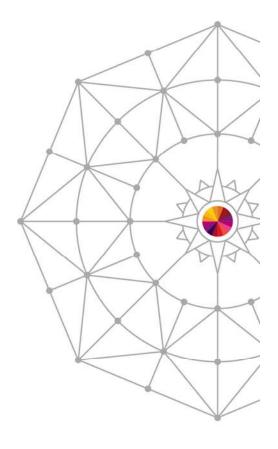






### And More...

Support CICS, ALCS and IMS Communities







### Prerequisites / Installation

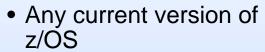




- IE 9 or above
- Firefox 21 or above
- Chrome 27 or above
- Safari 4 or above
- Minimum 2GB RAM











- Startup procedure (JCL)
- FTP server
- Web Server







# **Any Questions**



Complete your session evaluations online at www.SHARE.org/Anaheim-Eval

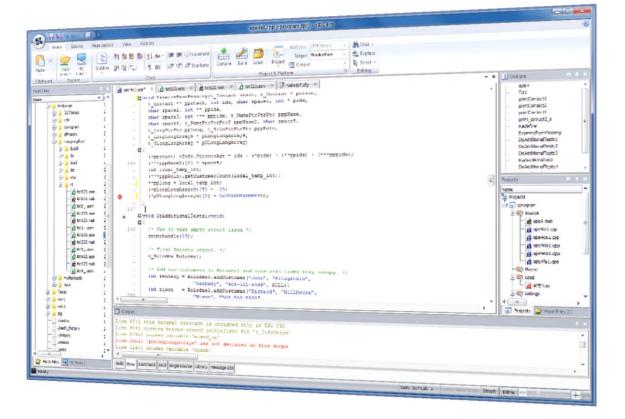


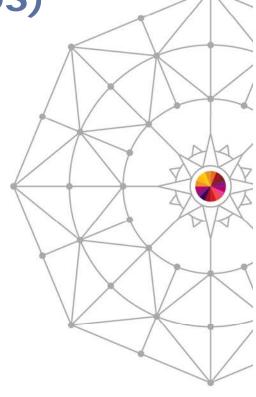


ZIDE Pro Overview

(Development Envi

(Development Environment for z/OS)









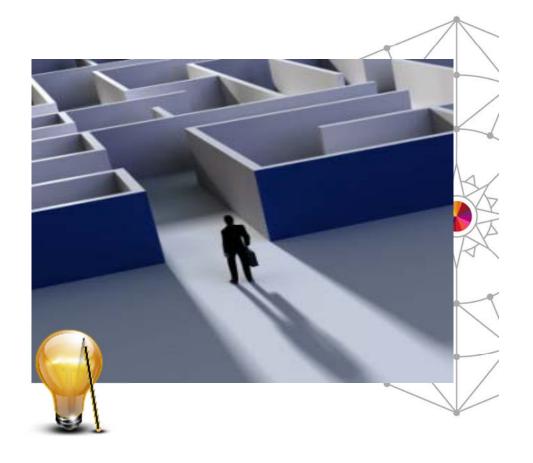
### The Need for zIDE Pro

#### **Business Challenges:**

- Need for a user-friendly IDE
- Need to increase
   Performance Efficiency
- Should allow for easy navigation to errors/warnings

#### **TPF Software's Solution:**

 zIDE Pro – A development & management tool for z/OS

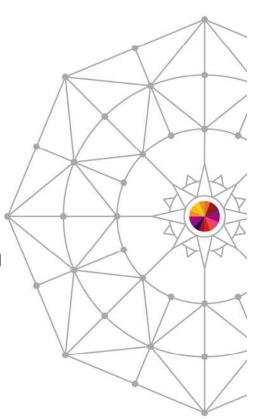






### **zIDE Pro Overview**

- Development and Management Tool
- Legacy-friendly
- For web-based applications running in z/OS, z/Linux and z/VM platform
- Modern GUI source code editor
  - Includes all the features expected in a modern text editor
  - PLUS syntax highlighting, language help, code outline
  - Allows editing via ISPF/XEDIT-like commands

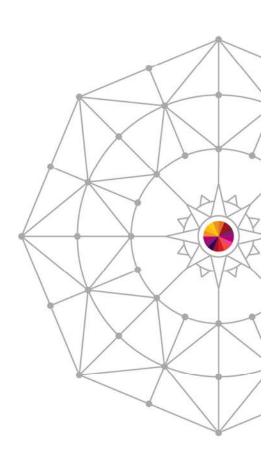






### **zIDE Pro Overview**

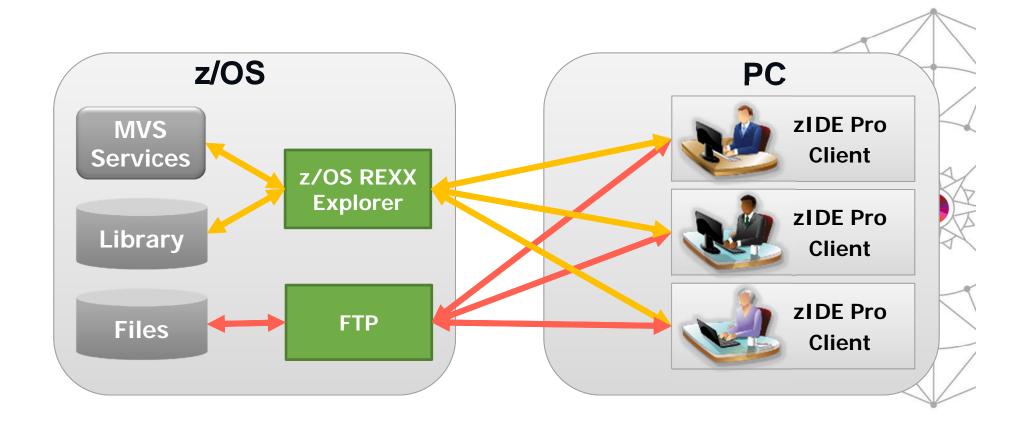
- Easy interpretation and navigation to errors/warning
- File Compare utility to compare any two files side-by-side
- Automatic file backup
- Powerful Search for strings in z/OS datasets,
   USS file system, z/Linux directories, and more
  - Double-click search results to view/edit file
- Single-click Compile/Build and Load to system







### **zIDE Pro Architecture**

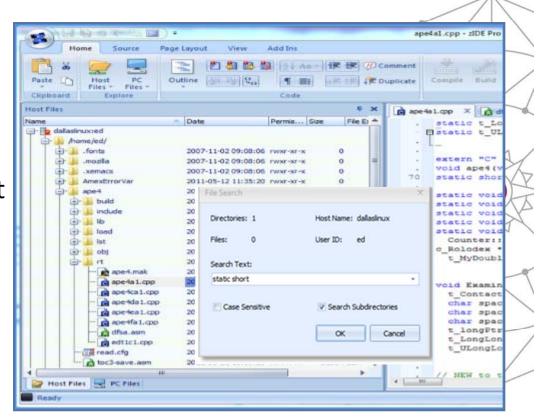






### File Management Features

- Host Files Views Browse and access remote host files from multiple hosts in single IDE
- PC Files Views Browse and access local files
- Remote host files can be transparently copied back to host
- Drag and Drop ability to transfer files to/from different project folders or PC
- Powerful Search of z/OS datasets, USS file system, z/Linux directories, and files locally

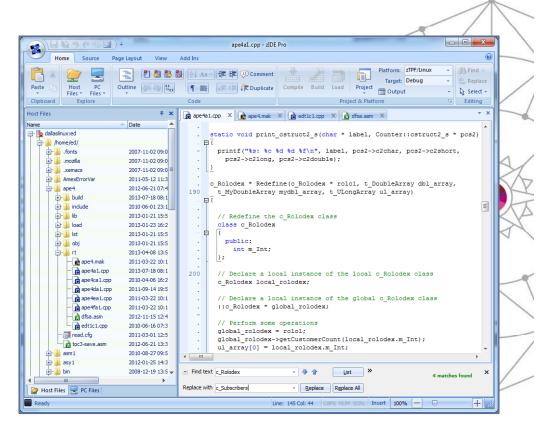






### **Editing/Coding Features**

- Library Interface & Project Support integrates with any source control management software to get, edit and promote source
- Legacy Editing X-EDIT Editor function supported
- Context-Sensitive Language Help

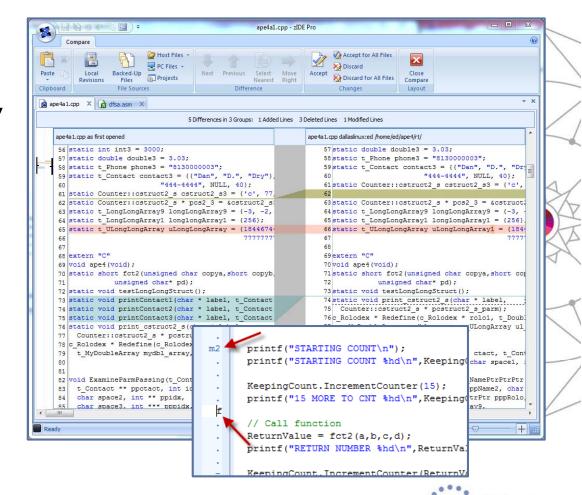






### **Advanced Editor Features**

- File Compare facility –
   Allows you to compare any two files side-by-side, with the difference highlighted in red color
- Syntax Highlighting –
   To detect typographical errors
- Enable Binary File Editing
- Provide Automatic Local Backup

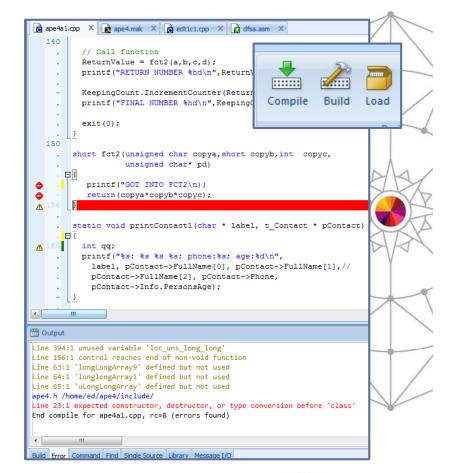






### Compile/Build/Load Features

- Highly intuitive Compile, Build and Load functions
- Intelligent compile/build operation
  - Targets (e.g. DEBUG, PRODUCTION)
  - Automatically detects the correct process and libraries
- Compiler/Job Output
  - Color-coded compiler output; displays the compiler errors in different color codes for easy recognition
- Easy interpretation and navigation to errors and warnings
  - Double-click errors and warnings in output to automatically open source and navigate to offending source line
- Ability to look at JES queue







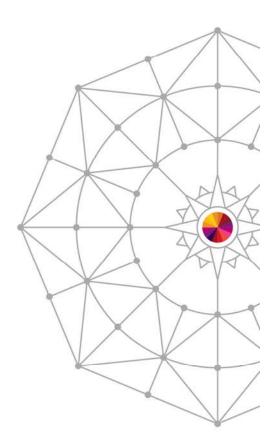
### **Key Benefits of zIDE Pro**

#### Saves coding time

- More familiar GUI interface, especially for newer programmers
- ISPF/XEDIT-like commands ease transition of power users
- Easier to detect errors while coding
- Efficient, intuitive compile/load/build process (buttons)

#### Saves training time

- Works like other Windows applications
- Promotes quality/standards
  - Middleware component allows to promote company standards and procedures







### Prerequisites / Installation





- Windows XP or greater
- 2 MB RAM

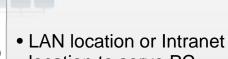


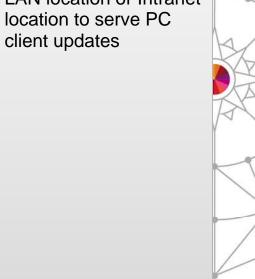
# SO/z

- Any current version of z/OS
- CPUID
- LOADLIB APF
- Datasets, Catalog and DASDOne reserved SVC number
- RACF rules need to be defined
- TCP/IP port
- Startup procedure (JCL)
- FTP server



**Other** 







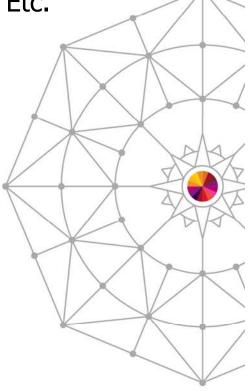


### **And More...**

Plugins for major Library Interfaces like Panvalet, CSV Etc.

Support for client-side scripting

Project support







# **Any Questions**



Complete your session evaluations online at www.SHARE.org/Anaheim-Eval





# Thank You for your attention....

#### Contact Us

#### **Exhibition Booth #207**

TPF Software Inc. 8729 Gleneagles Drive, Raleigh, NC, U. S. A. Phone: 919-676-5501

productsinfo@tpfsoftware.com





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