IBM's Remote Support Structure for z/VSE

and
how to get the most out of it

Gerhard E. Zierl / zierl@de.ibm.com

WAVV 2007

May 18 – 22, 2007

Green Bay, Wisconsin

Trademarks

The following are trademarks of the International Business Machines Corporation in the United States and / or other counties.

CICS*	IBM*	Virtual Image Facility
DB2*	IBM logo*	VM/ESA*
DB2 Connect	IMS	VSE/ESA
DB2 Universal Database	Intelligent Miner	VisualAge*
e-business logo*	Multiprise*	VTAM*
Enterprise Storage Server	MQSeries*	WebSphere*
HiperSockets	OS/390*	xSeries
	S/390*	z/Architecture
	SNAP/SHOT*	z/VM
		z/VSE
		zSeries

* Registered trademarks of IBM Corporation

The following are trademarks or registered trademarks of other companies.

LINUX is a registered trademark of Linus Torvalds

Tivoli is a trademark of Tivoli Systems Inc.

Java and all Java-related trademarks and logos are trademarks of Sun Microsystems, Inc., in the United States and other countries

UNIX is a registered trademark of The Open Group in the United States and other countries.

Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation.

Intel is a registered trademark of Intel Corporation.

Summary

L1/L2 service structure and how it's integration with the development team works for you. In addition this session will cover:

➢Defect versus non-defect oriented support

➢Severity, priority and response time

➢Steps you can take do to help accelerating problem resolution

➢Escalation of problems

➢Problems when opening a PMR with the call center

➢Dealing with problems involving the software of multiple vendors

➢Trailer calls and why is IBM doing them.

➢Future service trends in opening and handling problems

We are happy to collect your feedback and recommendations based on your own experience with the VSE service.
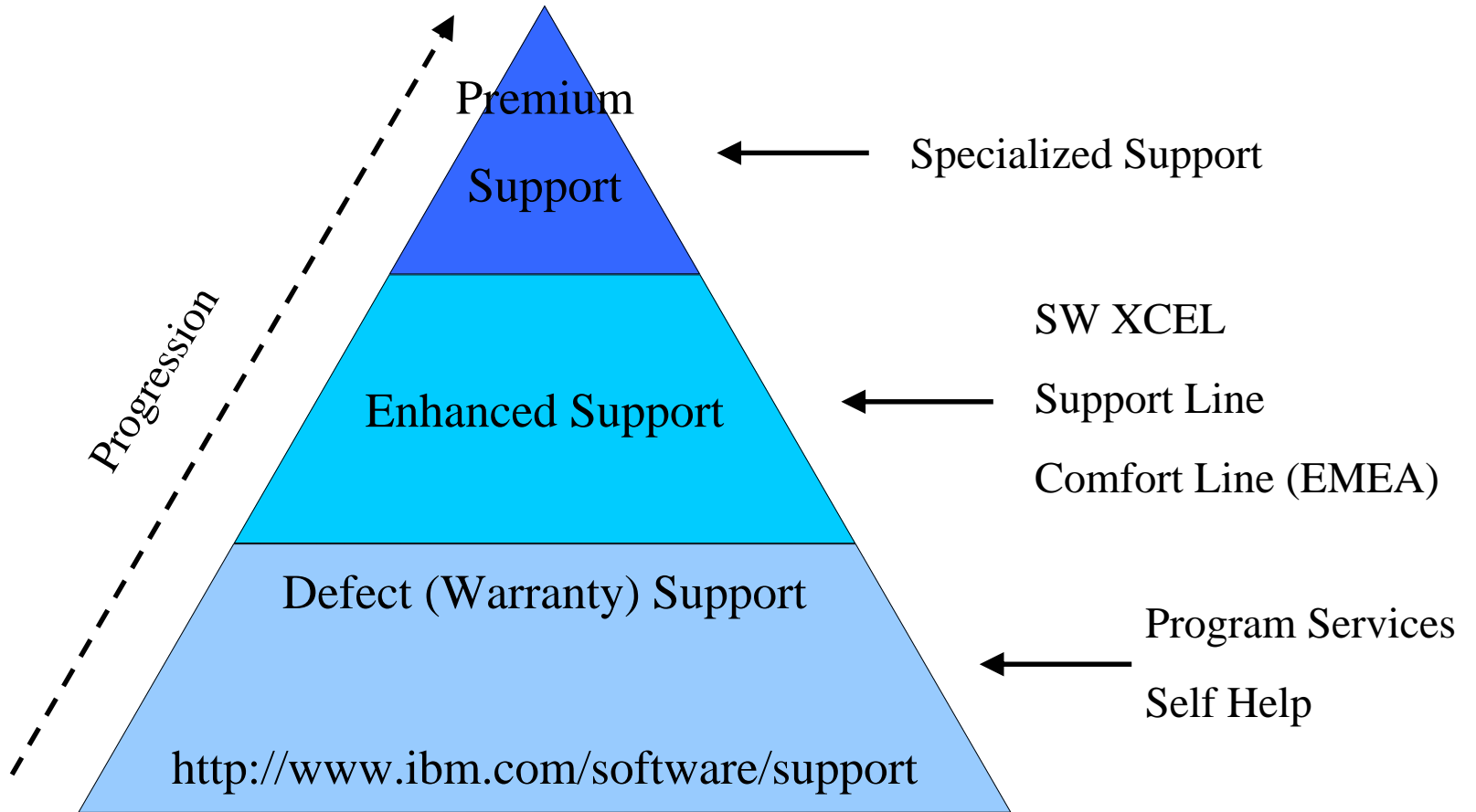
Agenda

➢The IBM support structure

➢How the VSE support is organized

➢L1/L2 service structure & it's integration into development

➢What can you do to accelerate problem resolution

➢VSE service information on the internet

➢Working with the IBM VSE remote support team

For an updated version of this presentation visit the VSE Homepage later:
http://www-1.ibm.com/servers/eserver/zseries/zvse/

Support Offerings Overview

Premium

Support ← Specialized Support

Progression

Enhanced Support ←

SW XCEL

Support Line

Comfort Line (EMEA)

Defect (Warranty) Support

Program Services

Self Help

http://www.ibm.com/software/support

Defect / Warranty Support

- First choice is self service on Internet
- Support is available electronic or voice
- Problem support is for suspected defects
  - For code problems
  - For errors in publications
- For critical problems 24 hours /7 days
- No service contract is required to open PMR
  - applies to USA
  - in some Geos customers have to accept charges if problem is not an IBM defect
- For software/releases which are still in service

Extended Service Contracts

IBM recommends to stay on supported releases always!

However, if you have a need to get defect support beyond the announced end-of-service date ...

GTS Sales number in US is 1-888-426-4343, Option 3

then IBM can offer you a service extension contract

➔ which is completely fee based

➔ IBM asks for a migration plan (max period is 2 years)

➔ contracts are offered thru IBM Global Technology Services

  ➢ But fulfilled by the product L1/l2/L3 teams

➔ some restrictions apply

Note: existing PTFs can still be downloaded from the IBM website!

Choosing the Right Severity

Severity 1: Critical impact/System Down: Business critical software component is inoperable. This indicates you are unable to use the program resulting in a critical impact on operations. This condition requires an immediate solution. *Response within 2 business hours*

Severity2: Significant impact: A software component is severely restricted in its use causing singificant business impact. Programis usable but is severely limited. *Response within 4 business hours*

Severity 3: Moderate impact: A noncritical software component is malfunctioning causing moderate business impact. Indicates that the program is usable with less significant features *Response by end of next business day*

Severity 4: Minimal impact: A noncritical software component is malfunctioning causing minimal impact, or non-technical request is made. Indicates that the problem causes little impact. *Response by end of next business day*

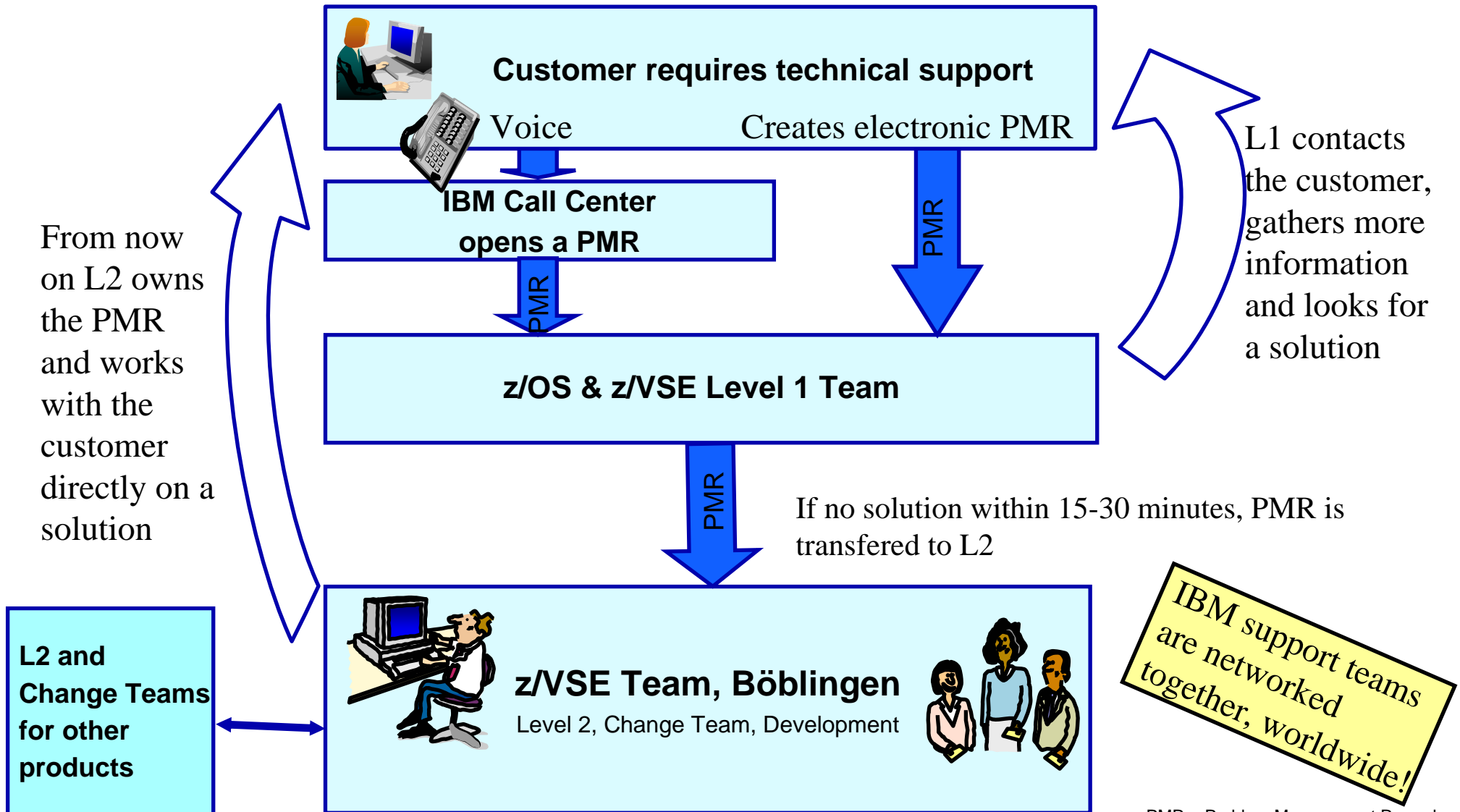# IBM Defect Support Statement and more ....
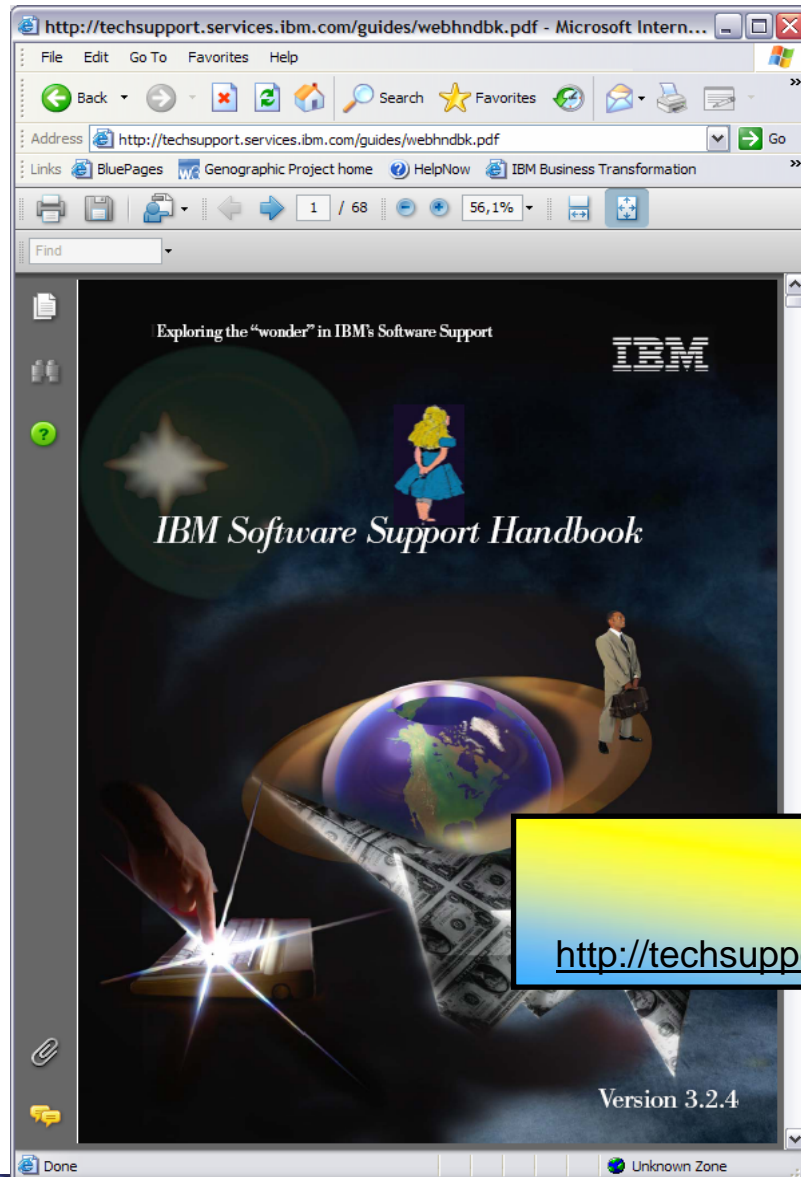
Program Services support for most IBM System z products includes problem support for suspected defects in IBM code and publications via telephone (voice), and electronic access. This support is available until such time as it is withdrawn with at least 6 months notice via an IBM announcement letter. IBM will provide remote technical specialists necessary to resolve defects in the majority of our mainframe products at no additional cost to you. Support for high severity problems is available 24 hours a day, 7 days a week.

Download from:

http://techsupport.services.ibm.com/guides/handbook.html

How Your z/VSE Call is Processed (US)

Customer requires technical support

Voice   Creates electronic PMR

PMR

PMR

IBM Call Center opens a PMR

PMR

L1 contacts the customer, gathers more information and looks for a solution

z/OS & z/VSE Level 1 Team

PMR

If no solution within 15-30 minutes, PMR is transfered to L2

From now on L2 owns the PMR and works with the customer directly on a solution

L2 and Change Teams for other products

z/VSE Team, Böblingen
Level 2, Change Team, Development

IBM support teams are networked together, worldwide!

PMR = Problem Management Record

How the VSE Team Works on Your Problem

For L2 we are organized in 4 sub teams consisting of the developers of that particular areas. If a PMR takes longer, the developer takes ownership.

P → | **VSE/AF, LE/VSE** |

M → | **VSE/POWER** |

R → | **VSE/VSAM and DLI** |

S → | **IUI, ICCF, FSU/PTF, Connectors** |

PMRs go to the development specialists

customer

You could be contacted by more than one L2 person
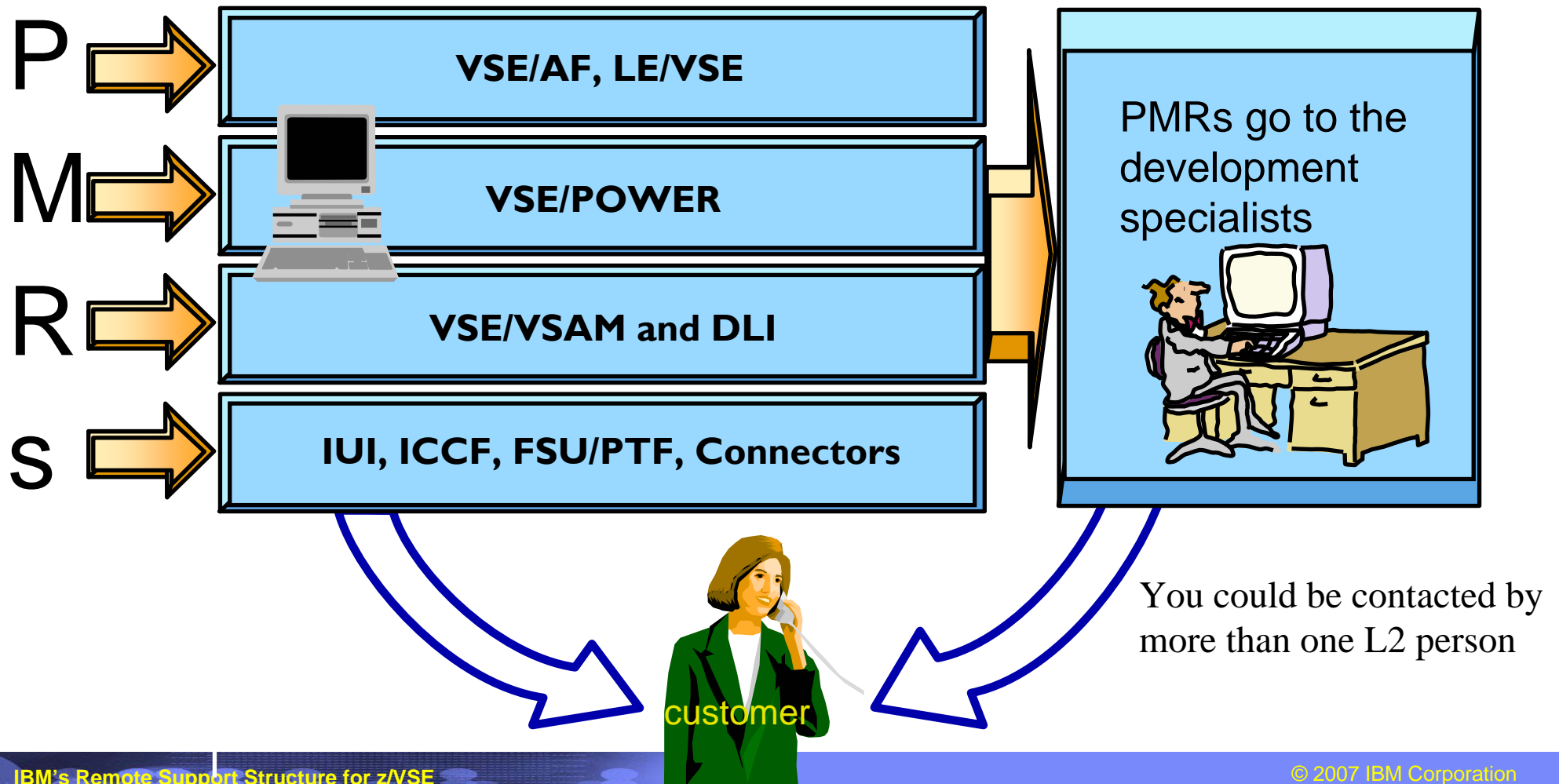
Before Calling IBM ... Problem Identification

- System Information

  - What is the failing product, version and release number?

  - What Machine model (and any other hardware relevant to the problem)?

- Problem Description:

  - What are the expected results?

  - What statements/commands are being used?

  - What are the exact symptoms and syntax?

  - What is or isn't happening, including error message numbers and text?

  - Is this the first time this operation has been attempted?

  - Is this the first time this problem has occured?

Problem Identification (2)

- ## Environment
  - When did this activity work last?
  - What has changed since the activity last worked?
    - E.g. Hardware change/reconfig, PTFs, new products, application changes, ...
  - What Machine model (and any other hardware relevant to the problem)?
  - If the problem does not occur every time, what are the conditions?
  - Is there any product running on the system which may be conflicting?

- ## Problem Isolation:
  - Identify the specific feature of the product as lsoe as possible?
  - Can the problem be reproduced at will?
    - If so, please provide a reproducible testcase or instructions

Other helpful Information

- Do you have any business deadlines?
- Your availability, how?
- Your e-mail address?
- Alternate contact in case of your absence?
- Are there other PMRs which are related?

Please make a note of
the PMR number once
it has been opened

Sending Technical Documentation to IBM

- Smaller documents, Text documents should be sent thru e-mail.
  - The L2 rep will tell you the e-mail id.
  - Always use the team-id, not a personal id you know.
- Large files, like traces or dumps should be sent to the IBM ftp server
  - The L2 rep will point you to the instructions http://www-03.ibm.com/servers/eserver/zseries/zvse/support/problem.html
  - Dumps should be sent in raw format and binary

Using the IBM ftp Servers

Use following naming conventions
xxxxx.bbb.ccc.yyyyyyyyyy.zzz (Sample: 56987.L6Q.649.SADump_HW.bin)

	Explanation	Example
xxxxx	1st part of PMR number (5 digits)	34583
bbb	2nd part of PMR number (branch office)(3)	L6Q
ccc	3rd part of PMR number (country, 3 digits)	649 (Canada) 000 (USA)
yyy	Short description for the file	SDAID_IO_TR_01
zzz	File type (3)	bin txt

Then a robot will automatically update the PMR and inform the support center!

Using the IBM ftp Servers (2)

- Use NEW directory structure
  - cd toibm/VSE/
  - cd fromIBM/VSE/
  - Old directories will be closed soon e.g./VSE/toibm/

- If **put** transmission fails, add a suffix to the name
  - Files in directory ‚toibm' cannot be replaced or purged
  - Files stay there for 7 days, then automatically purged

How IBM handles Customer Data

- We treat your data like IBM confidential data
- We use it only for the purposes it was provided
- We do not disclose it to other parties
  - This includes 3rd party software vendors
- We delete/destroy the data when it is no longer needed

How we Work the Problems

- ## We need documentation about the problem
  - Console logs, listings, job streams, definitions, ...
  - Dumps, if available
  - Traces, if available

- ## We may send you traps or special traces to get more precise doc, closer to the problem
  - Sometimes multiple iterations

- ## We may ask you to recreate and take a consistent set of documentation

Complex problems could create a lot of work and ask for significant engagement of our customers!

If your Problem is already known to IBM

- A fix/PTF or a workaround will be provided
- If no workaround available and one is required we will work with you to find the best possible workaround.
  - We will notify you when APAR/PTF becomes available

If the Problem is a new Problem

After problem determination is complete and the defect is confirmed

– We will create an APAR and development determines how to best address the problem

– APAR = Authorized Problem Analysis Report

– APAR closings:

• PER – meaning a PTF (sometimes a local fix) will be provided.

• FIN – code fix will be defered to the next release

– FIN = Fixed If Next

Problems related to Third Party Software

Why is this so crucial in the VSE environment:

- third party system management products often have to
  - place hooks in IBMs code to intercept IBM functions
  - intercept supervisor calls to gain control
  - modify IBM internal control blocks
  - replace IBM provided program phases with their own and rename the IBM phase to something else
  - force a bypass of checking functions or lock mechanisms
- IBM usually does not know about these 'non-interfaces' and cannot do much about it
- in numerous cases the sensitivity of these modifications is not always completely understood
- even tested by the vendor up front, in several cases the code breaks e.g.
  - when system is under stress, or in multiprocessing environments
  - when third party products from different sources try to intercept or place hooks at the same place
  - when IBM supplied PTFs unintentionally remove or change such 'interfaces' (e.g. sometimes just fixes, or new development)
  - when a condition occurs which can't be handled by the third party code
- often the error appears like IBM code is broken (hard/soft waits, loops, program abends)

IBM works with third parties in providing interfaces, discussing impacts of new functions, negotiate pre-GA testing, etc. This is to minimise the impact on customers.

Once we have Provided the final Solution ...

- Please test it out and give us feedback
- Once you confirm the problem is solved
  - We would like to close the PMR
  - If you need additional time then let us know
  - If we do not get hold of you several times we will leave you a message and close the problem
- Closed PMRs can be reopened within 30 days
  - For new problems please open a new PMR

Note: if you are not satisfied at any time between opening the PMR until the final solution, you may always escalate and ask for a duty manager who will listen to your concerns.

Customer Satisfaction Surveys

IBM selects PMRs randomly a few days after closure and calls the customer to determine how our service has been delivered.

- Please take the time and give us your feedback
    - If we can do better next time then let us know how !
    - If we did great and you are very satisfied then let us know as well !

Self Service thru the Internet

- Check out the z/VSE web site on a regular base
- Download PTFs, RSL, and PSB buckets

Check out the VSE Homepage for latest News

Check out the VSE Homepage for latest News

Retrieving APARs/PTFs over the Internet

http://www-1.ibm.com/servers/eserver/support/zseries/index.html

or via: www.ibm.com >> Support & downloads >> Support by product - Servers >> Mainframe servers

>> Resolving Problems

>> APAR with PTF ordering
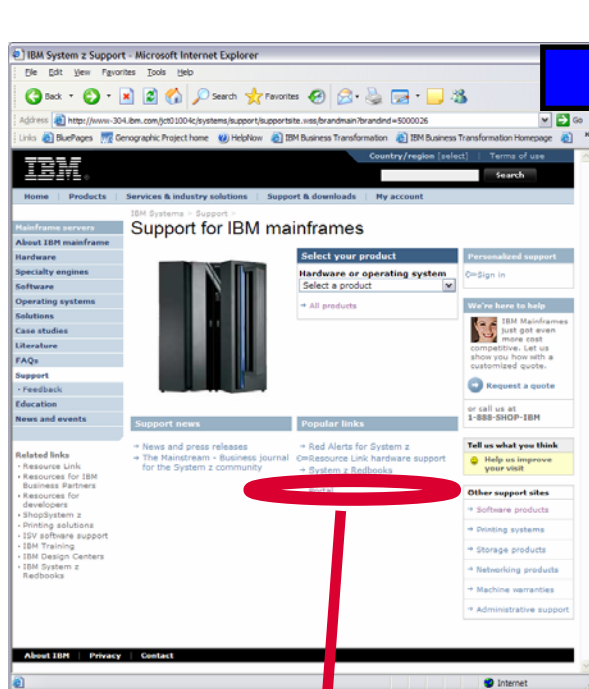
System z System Programmer Portal

For most functions a log-in is required. The id can be created online.
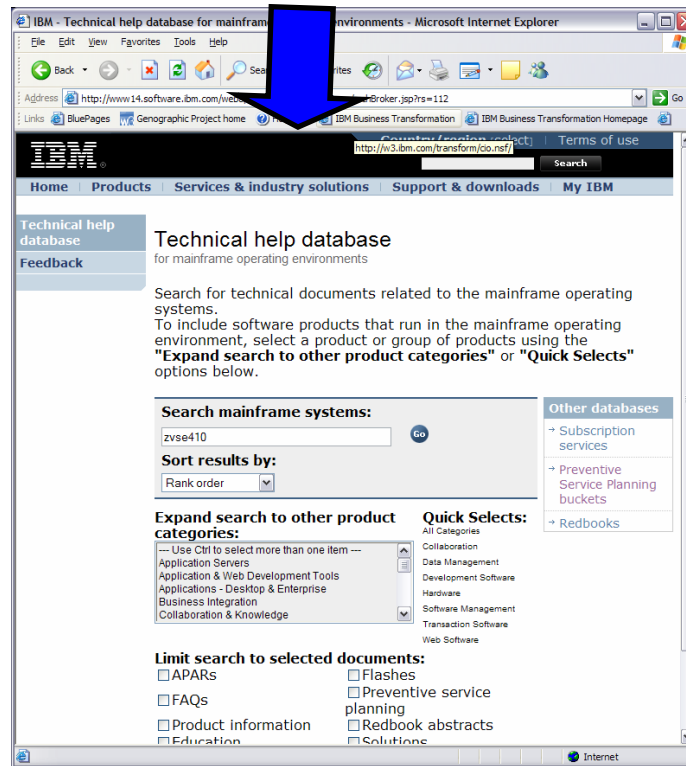
Searches in complete IBM APAR database.

Once the APAR is found:

– select the PTF for your release and submit the order

– You will be informed via e-mail about status and how to retrieve the package from an ftp server

– ordering and download available 24x7

– Installation instructions are available via the VSE

Use also for ordering RSLs or PSBs

Transfering and Installing the PTF into the VSE System

via TCP/IP (recommended)

- from the PC via TCP/IP ftp to VSE into predefined VSAM file 'IJSYSPF'
  - the VSAM file has to be defined in TCP/IP:
    - DEFINE FILE, TYPE=ESDS,IJSYSPF,PUBLIC='IJSYSPF'
  - transfer using parameters 'binary', 'quote site recfm f' and 'quote site lrecl 80'
  - install the PTFs via the IUI dialogs
  - service medium is 'disk'

alternatively:

       via a VTAPE

       or via Host Transfer File (HTF), or into a library member

> **Warning!**
> ☞ loading PTF files directly into the POWER reader gives fatal results:
> - PRE and CO requirements are not necessarily fulfilled due to any sequence
> - PTF data containig POWER-JECL will be interpreted by POWER
> - indirect PTF installation is not possible

find detailed instructions in: http://www-1.ibm.com/servers/eserver/zseries/zvse/documentation/edelivery.html#ftp

or via VSE home page >> Service&Support >> How to order >> How to apply PTFs from the Internet

Other Goodies from your z/VSE Team

Handy tools for download:

- z/VSE CPU monitor
  - Basic monitor to measure CPU utilization over a given timeperiod

- IP trace tool
  - To read IP packet traces captured with TCP/IP 1.5.

- ListVOL1 Utility
  - Prints header and first 2 records of an AWS tape image file

- JCalc LE/VSE, JLink LE/VSE, JRun LE/VSE Tools
  - Tool to help you in application programming coping with LE/VSE

- Multi Instant Logic Analyzer 4 VSAM
  - A set of tools to assist in analysing VSAM file and catalog problems

Disclaimer: all tools are distributes ‚as-is', no support, no warranty !

... more useful Information ...

►see our issue of

►*VSE Hints & Tips* (Edition September 2006)
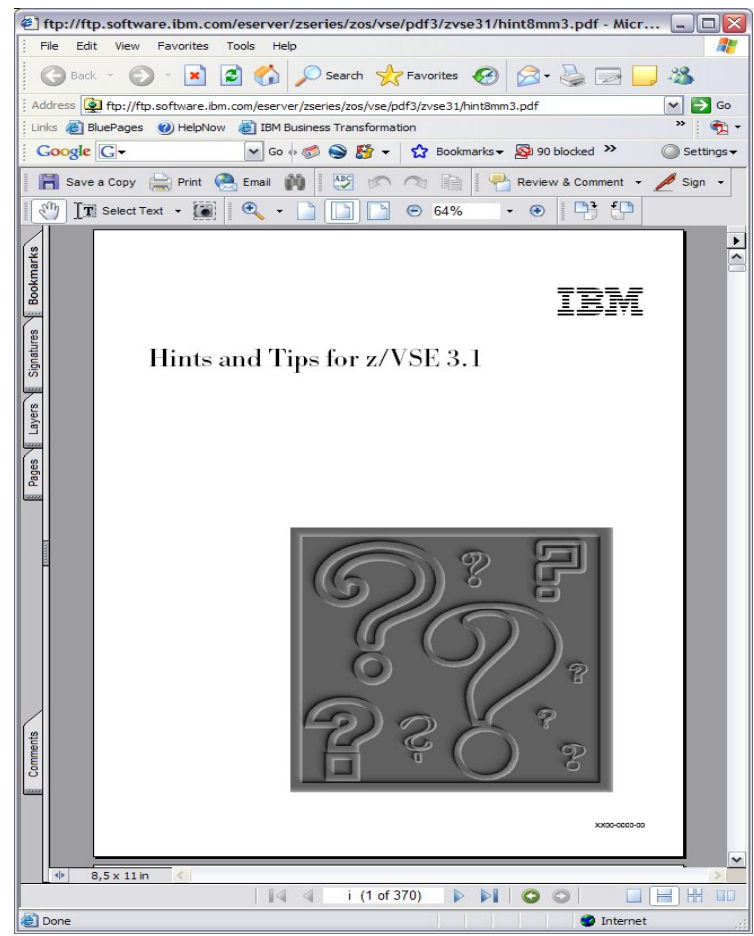
download as PDF file from the VSE homepage:
ftp://ftp.software.ibm.com/eserver/zseries/zos/vse/pdf3/zvse31/hint8mm3.pdf

Thanks for listening!

Questions?

Comments?

Suggestions?

now ... or anytime to zierl@de.ibm.com