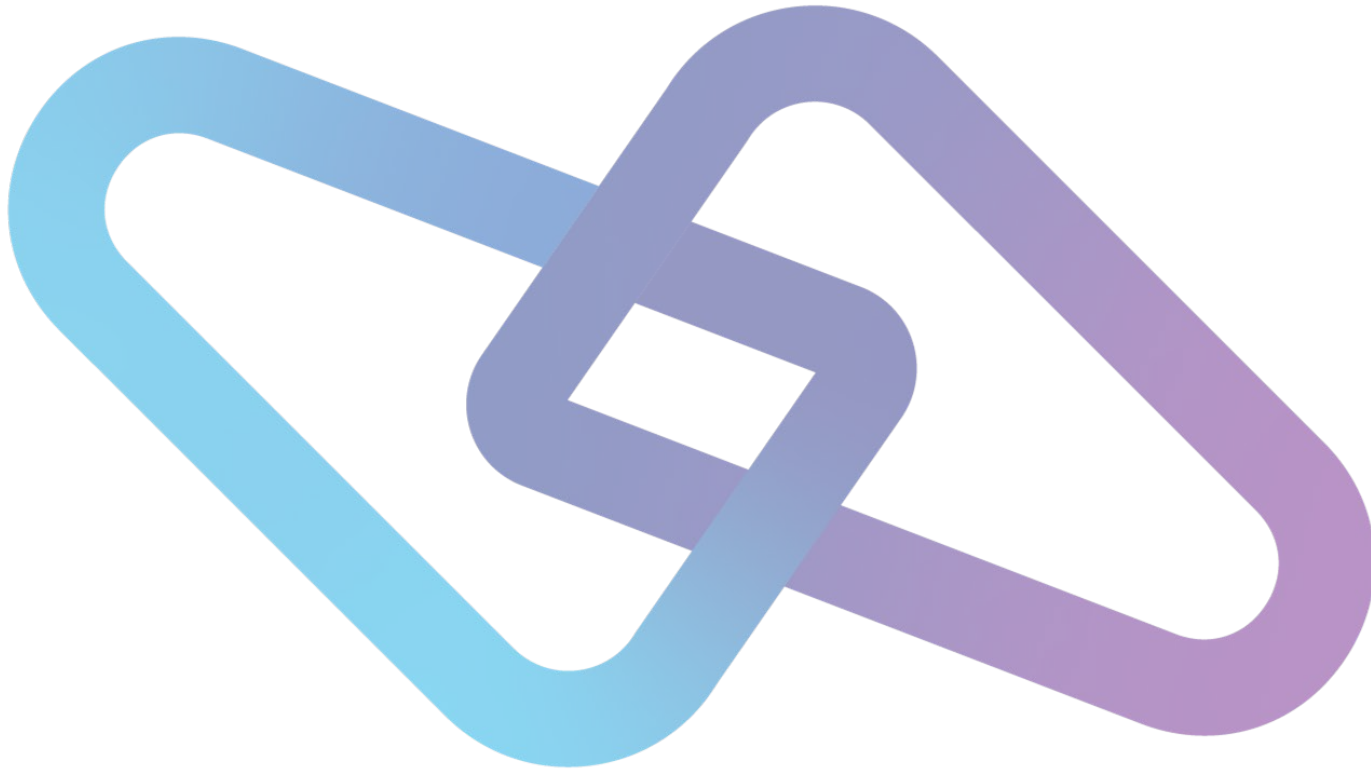




Inside 21CS Support: From Issue to Resolution



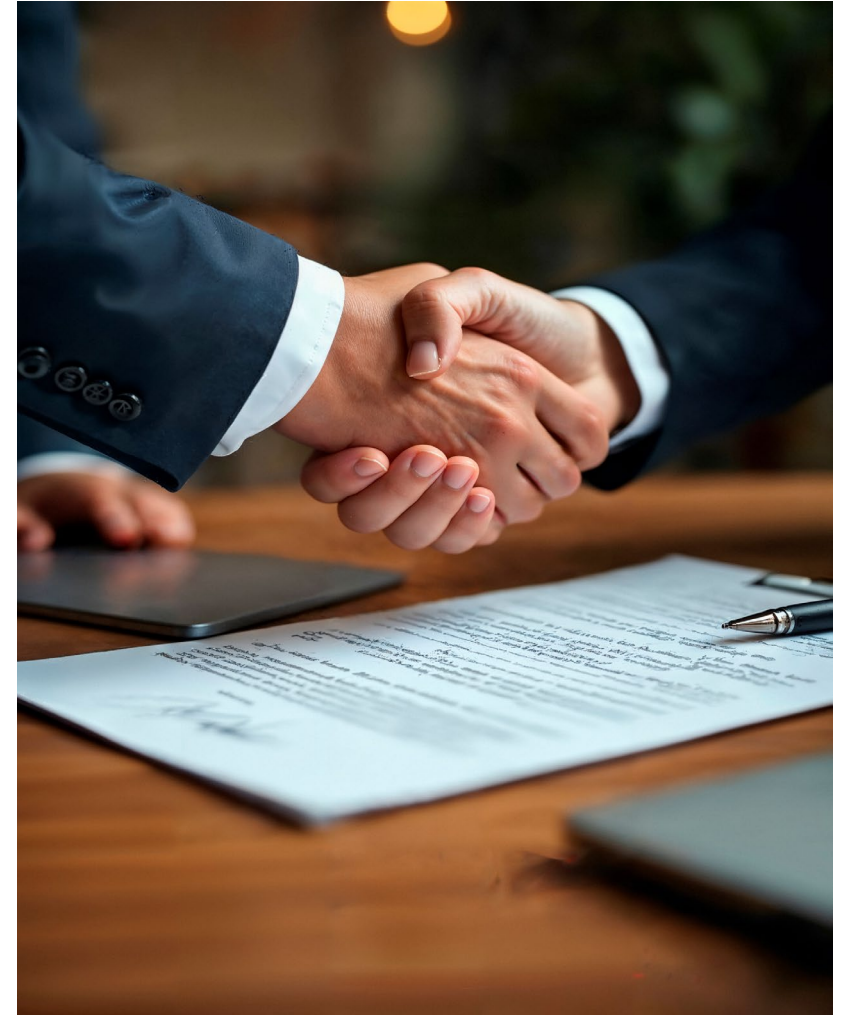
Michael Ibikunle
Technical Support Engineer I

Agenda

- The 21CS Support Cycle
- APARs, PTFs, RSLs
- 21CS Support and the Customer
- Case Walkthrough
- Best Practices
- Q&A

21CS Support Lifecycle

- New product release is supported for a minimum of five years
 - Projected new releases every 2-3 years
- Entitled to support throughout the license term
 - Covers latest release (and superseded versions still in support)
- End-of-Support (EOS) is announced one year before license expiry
 - Once in EOS the product is no longer supported.



21CS Support Process



- Customer can reach 21CS by email at <support@21cs.com>. For urgent matters, they may also contact 21CS by phone at +1 978-451-1010
 - Describes incident as thorough as possible with time, symptoms, and context
- The Support Team opens a case for the customer and emails them the case details. For further communication, customers should reply all to the email.
 - Opens a case with logs, symptoms, and context
 - Severity Level(1-4) is assigned to case depending on context of scenario.
 - Customer will review severity level assignment to ensure correct level is assigned.
 - Severity Level 1 suggested to contact via direct Phone Call
- Support analyzes and understands the issue
 - Replicate when feasible.
- If valid, APAR is raised, support team begins developing a fix to be delivered as a PTF
 - Conducts detailed analysis for targeted PTF resolution
- PTF tested and delivered to the customer
 - Tested in sample environment for accurate PTF delivery
 - The customer is then asked to verify the PTF

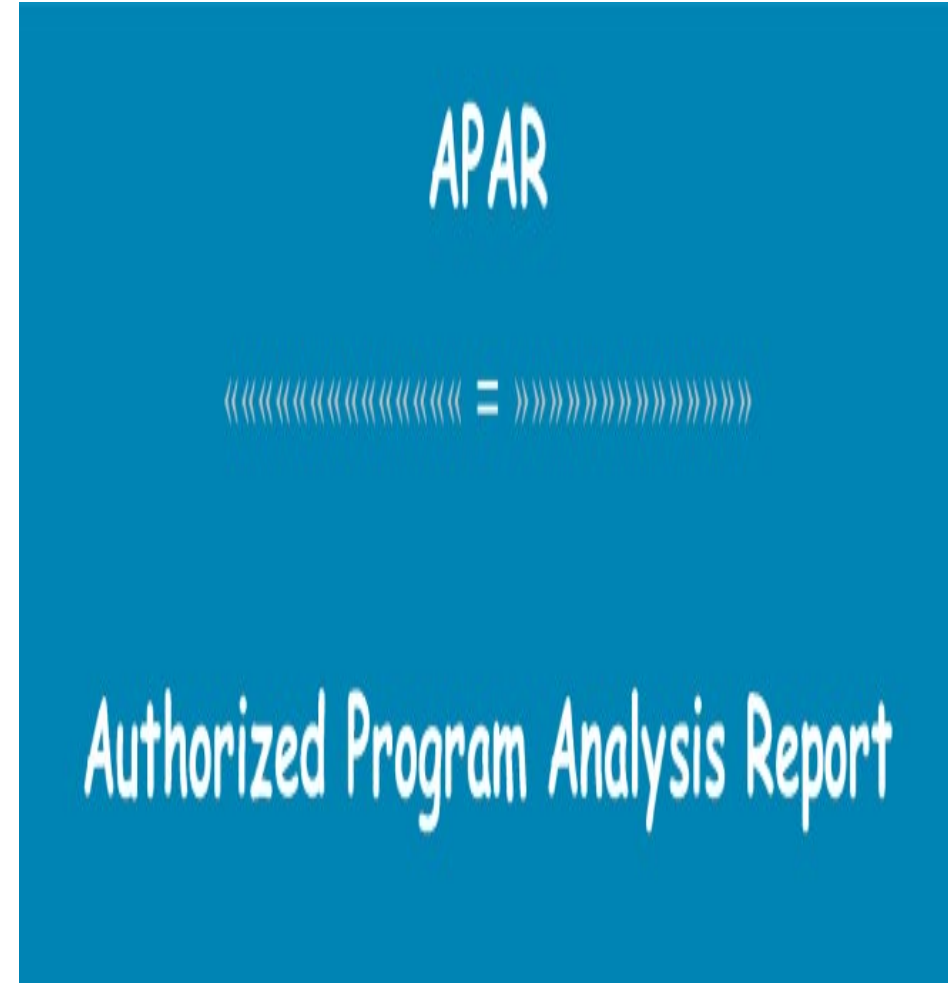


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What is an APAR

- Authorized Program Analysis Report
 - A formal record of a known software problem
- Raised for known problems in VSEⁿ
 - Typically linked to abends, performance drops, or feature malfunctions
- Used when a problem is confirmed
 - Ensures focus on real, demonstrable issues



What is a PTF

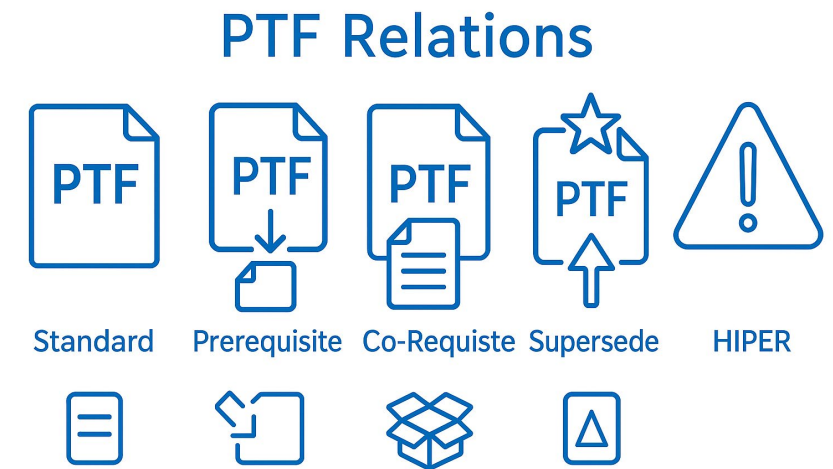
- Program Temporary Fix
 - A code patch or configuration change
 - Different relations for PTFs
 - Indirect and Direct PTFs
- Developed and delivered to resolve an APAR
 - Each PTF is associated with a unique APAR
- Tested before release and tied to specific APARs
 - Quality assurance steps validate compatibility



PTF Relations



- Standard PTF Relation
 - No extra attributes
 - Install whenever you want
- Prerequisite PTF Relation
 - PTF which require another installation of a PTF to be installed
- Co-Requisite PTF Relation
 - Two PTFs might need to be installed at the same time
 - Both PTFs are packaged together
- Supersede PTF Relation
 - PTF does not need a previous PTF
 - All code from previous will be contained within in the PTF
- Hiper(High Impact/Pervasive) PTF
 - Contains critical functionality that is needed
 - Recommended to be installed as soon as possible



What is an RSL

- Recommend Service Level
 - A bundle of multiple PTFs
- Collection of PTFs considered stable and tested together
 - Improves system reliability and reduces patching risk
- Important for staying current and stable
 - RSL every six months
 - Ensures latest fixes and enhancements are applied



RSL Sets

- RSL Base
 - All base products except for HLASM and TCP/IP
- RSL HLASM
 - All HLASM(High-Level Assembler) PTFs that are done in one packet
- RSL for Optional Products
 - All RSL that are not delivered as part of the base tape
- RSL TCP/IP
 - RSL for TCP/IP delivered in a single package

RSL Sets



HLASM, TCP/IP PTFs and why not to merge them with others



- Merging HLASM PTFs with Base PTFs during installation can lead to unexpected issues, such as indirect application errors.
 - In one case, this caused program interruptions and job cancellations.
- To prevent these problems, HLASM PTFs should be installed separately from indirect PTFs.
- As a result, the latest RSL keeps HLASM and BASE PTFs separate, and we recommend that they remain unmerged.
- RSL TCP/IP contains PTFs that are always applied directly, avoiding indirect application challenges since TCP/IP lacks direct libraries.
 - Separating these updates prevents conflicts with indirectly installed PTFs, reducing installation risks.

Administrator Fast Path	Synonym
142	Default: Yours:

```
IESADMSL.IESEPTF          PTF HANDLING          APPLID: DBDCCICS
Enter the number of your selection and press the ENTER key:
1 Print Service Document
2 Analyze and Apply PTFs
3 Apply PTFs
4 Remove PTF Records from History File

PF1=HELP          3=END          4=RETURN          6=ESCAPE (U)
                  9=Escape (m)          PATH: 142
==>
```

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21CS Support Contribution

- Provide response goal obligation depending on severity of impact
 - Inform customer within response timeframe that issue has been received and acknowledged
- Assist with updates, PTF application, and validation steps
 - Ensure full comprehension and understanding
- Follow up support to confirm resolution and gather feedback
 - Worldwide support service on call
 - 24x7 support access for product issues, documentation, and Q&A

Severity	Definition	Impact	Response Goal
Severity 1	Business critical functionality is inoperable or a critical interface has failed. This usually applies to a production environment and indicates an inability to access products or services resulting in a critical impact on operations. This condition requires an immediate solution.	Critical business impact	Within 30 minutes
Severity 2	A product, service, business feature, or function of the product or service is severely restricted in its use, or you are in jeopardy of missing business deadlines	Significant business impact	Within two business hours
Severity 3	The product, service or functionality is usable and the issue does not represent a significant impact on operations	Some business impact	Next business day
Severity 4	An inquiry or non-technical request	Minimal business impact	Next business day

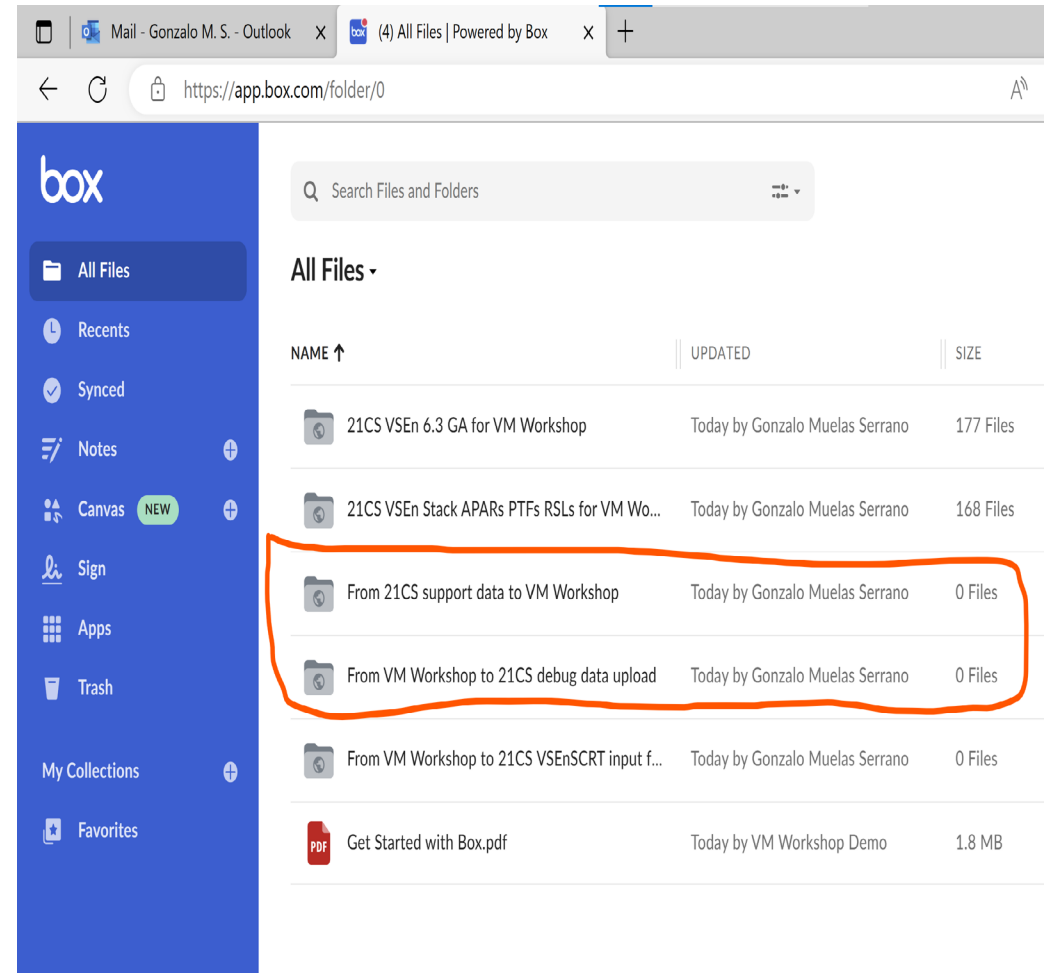
Customer Collaboration Efforts

- Provide clear use case
 - Include JCL, timing, input data
- Include system dumps, logs, JCL scripts
 - Ensure completeness and clarity
- Describe system environment and history of change
 - Versions, patches, recent upgrades



Delivery: You to 21CS

- Customers uses box for structured data delivery
 - Folder format: “From ’<customer name>’ to 21CS debug data upload”
- Subfolders for each data category (e.g., console logs, JCLs)
 - Organize by problem type or date
- Upload console output, dumps, configurations
 - Include system version, job streams, time of failure

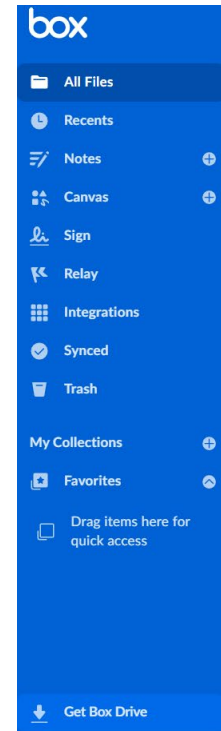


The screenshot shows the Box web interface. The left sidebar contains navigation options: All Files, Recents, Synced, Notes, Canvas (NEW), Sign, Apps, Trash, My Collections, and Favorites. The main content area displays a list of files and folders under the heading "All Files". The list has columns for NAME, UPDATED, and SIZE. The following table represents the data shown in the screenshot:

NAME	UPDATED	SIZE
21CS VSEn 6.3 GA for VM Workshop	Today by Gonzalo Muelas Serrano	177 Files
21CS VSEn Stack APARs PTFs RSLs for VM Wo...	Today by Gonzalo Muelas Serrano	168 Files
From 21CS support data to VM Workshop	Today by Gonzalo Muelas Serrano	0 Files
From VM Workshop to 21CS debug data upload	Today by Gonzalo Muelas Serrano	0 Files
From VM Workshop to 21CS VSEnSCRT input f...	Today by Gonzalo Muelas Serrano	0 Files
Get Started with Box.pdf	Today by VM Workshop Demo	1.8 MB

Delivery: 21CS to You

- 21CS uses Box for delivering PTFs, logs, and instructions
 - Folder format: “From 21CS support data to '<customer name>' ”
- Each APAR has its own subfolder with PTF and documentation
 - Includes APAR description, install steps, known limitations



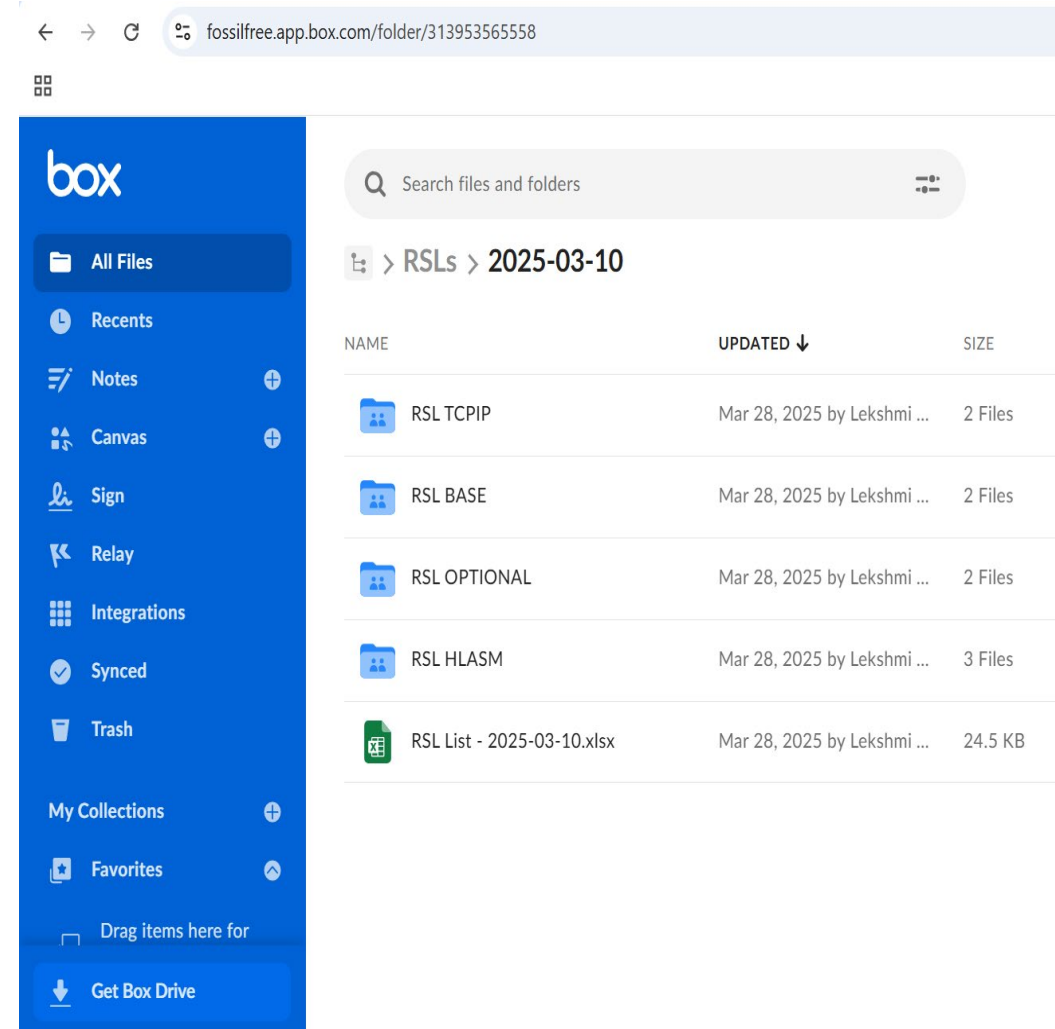
Search files and folders

All Files > VM Workshop Demo > 21CS VSEn Stack APARs PTFs RSLs for VM Workshop

NAME ↑	UPDATED	SIZE
RSLs	Mar 28, 2025 by Lekshmi Jayan	45 Files
VA00001	Jun 26, 2024 by A Prior Collaborator	1 File
VA00002	Jun 26, 2024 by A Prior Collaborator	1 File
VA00003	Jun 26, 2024 by A Prior Collaborator	1 File
VA00004	Jun 26, 2024 by A Prior Collaborator	3 Files
VA00006	Jun 26, 2024 by A Prior Collaborator	3 Files
VA00007	Jun 26, 2024 by A Prior Collaborator	3 Files
VA00008	Jun 26, 2024 by A Prior Collaborator	1 File
VA00009	Mar 28, 2025 by Lekshmi Jayan	3 Files
VA00010	Feb 21, 2025 by Lekshmi Jayan	1 File
VA00011	Jun 26, 2024 by A Prior Collaborator	1 File

Delivery: 21CS to You

- RSL folders include:
 - “RSL.BASE”: For base products
 - “RSL.OPTIONAL”: For optional add-ons
 - RSL.TCPIP”: For TCP/IP stacks
 - “RSL HLASM”: For HLASM toolkit and related updates



The screenshot shows a web browser window displaying a Box file sharing interface. The address bar shows the URL: fossilfree.app.box.com/folder/313953565558. The interface includes a search bar, a breadcrumb path for 'RSLs > 2025-03-10', and a table of files and folders. The table has columns for NAME, UPDATED, and SIZE. The files listed are:

NAME	UPDATED ↓	SIZE
RSL TCPIP	Mar 28, 2025 by Lekshmi ...	2 Files
RSL BASE	Mar 28, 2025 by Lekshmi ...	2 Files
RSL OPTIONAL	Mar 28, 2025 by Lekshmi ...	2 Files
RSL HLASM	Mar 28, 2025 by Lekshmi ...	3 Files
RSL List - 2025-03-10.xlsx	Mar 28, 2025 by Lekshmi ...	24.5 KB

Summary Spreadsheet



- Interactive summary spreadsheet with dynamic filters
 - Instantly narrow results by APAR, PTF, affected system, installation method, etc.
- Flexible access options
 - View directly in Box preview or download as an Excel file for local analysis

fossilfree.app.box.com/folder/214227470894

Search files and folders

> 21CS VSEn Stack APARs PTFs RSLs for VM Workshop

NAME	UPDATED ↓	SIZE
VA00100	Jun 26, 2024 by A Prior C...	3 Files
VA00133	Jun 26, 2024 by A Prior C...	3 Files
VA00139	Jun 26, 2024 by A Prior C...	3 Files
VA00122	Jun 26, 2024 by A Prior C...	3 Files
VA00135	Jun 26, 2024 by A Prior C...	3 Files
VA00147	Jun 26, 2024 by A Prior C...	3 Files
APAR - PTF numbers - RS... V29	Jun 6, 2025 by Lekshmi Ja...	54 KB

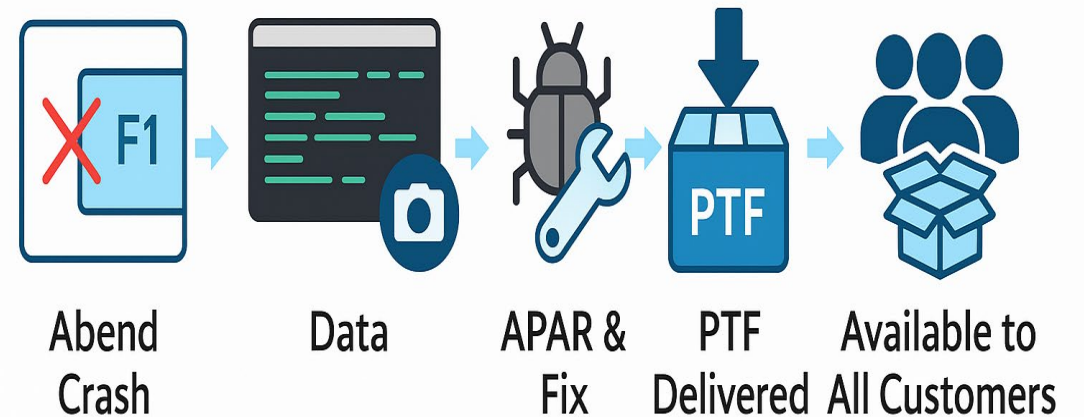
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Case Walkthrough

- Symptom: Abend in partition F1
 - Irregular issue during specific workload
- Customer provides dump and job stream
 - Captures SYSLOG, console output
- APAR raised, fix tested, PTF delivered
 - Corrected and resolved
 - Documented description.
- Fix included in next RSL update
 - RSL is grouped together
 - Available for all customers

Case Walkthrough



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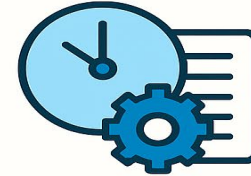
Customer Best Practices

- Stay current with RSLs
 - Schedule routine maintenance windows
- Keep documentation of system changes
 - Track APAR/PTF installation history
- Use standard naming conventions
 - Aids readability and support analysis
- Reply promptly to emails from 21CS Support
 - Reduces turnaround and back-and-forth

Customer Best Practices



Stay current
with RSLs



Schedule
maintenance windows



Track APAR/PTF
history



Use naming
conventions



Use naming
conventions



Reply promptly
to 21CS support

Q & A

Thank you!