

Sept 23rd 2010



Tivoli Integrated Portal





What is Tivoli Integrated Portal about?

TIP is a common component that aims

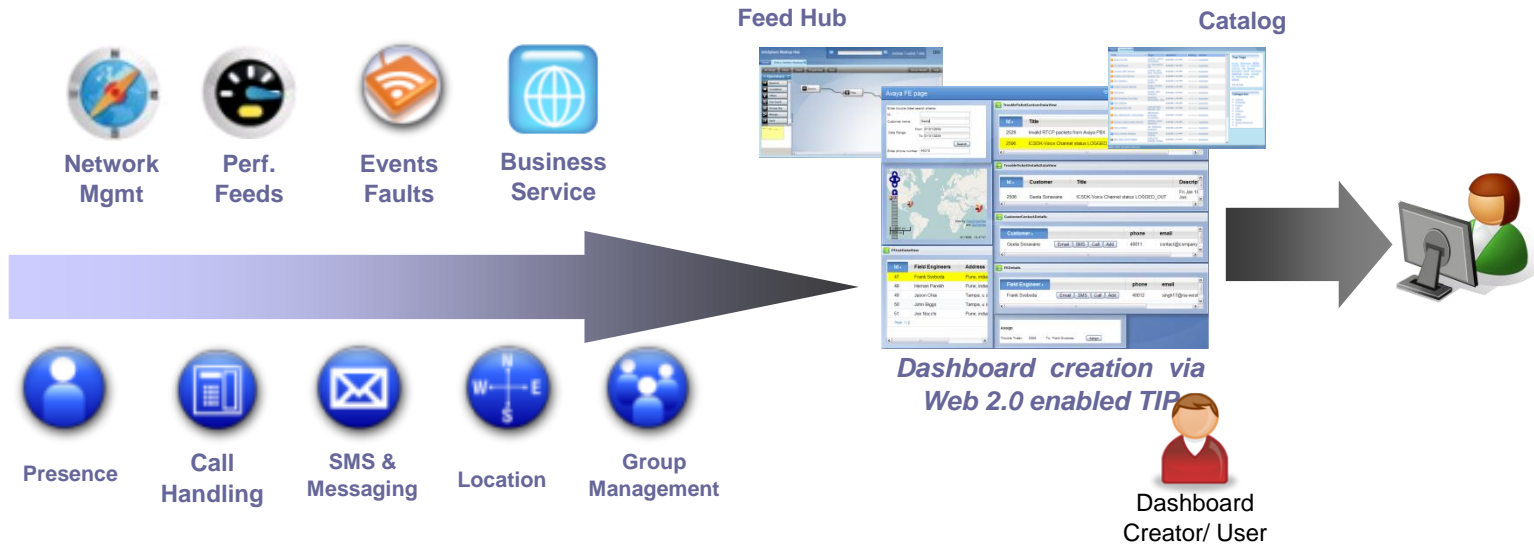
- To provide a Web 2.0 integrated service management portal across multiple Tivoli products which supports:
 - One web entry point for user login, regardless of what TIVOLI products are deployed and how they've been deployed, a unified security model, a consistent look and feel
 - Serving up content from multiple Tivoli products integrated into interactive screens to support drill-down scenarios
 - Is highly customizable by systems-integrators, administrators and end users
- Eliminate siloed product consoles and the need to jump between multiple windows to perform service management tasks
- Supports multiple user personas, ranging from end users to service administrators





Two overarching Goals

Enable customers to create effective dashboards for various personas



Facilitate TIVOLI products to use TIP as console framework and enable collaboration across the products installed on TIP





What's New in TIP 2.2?

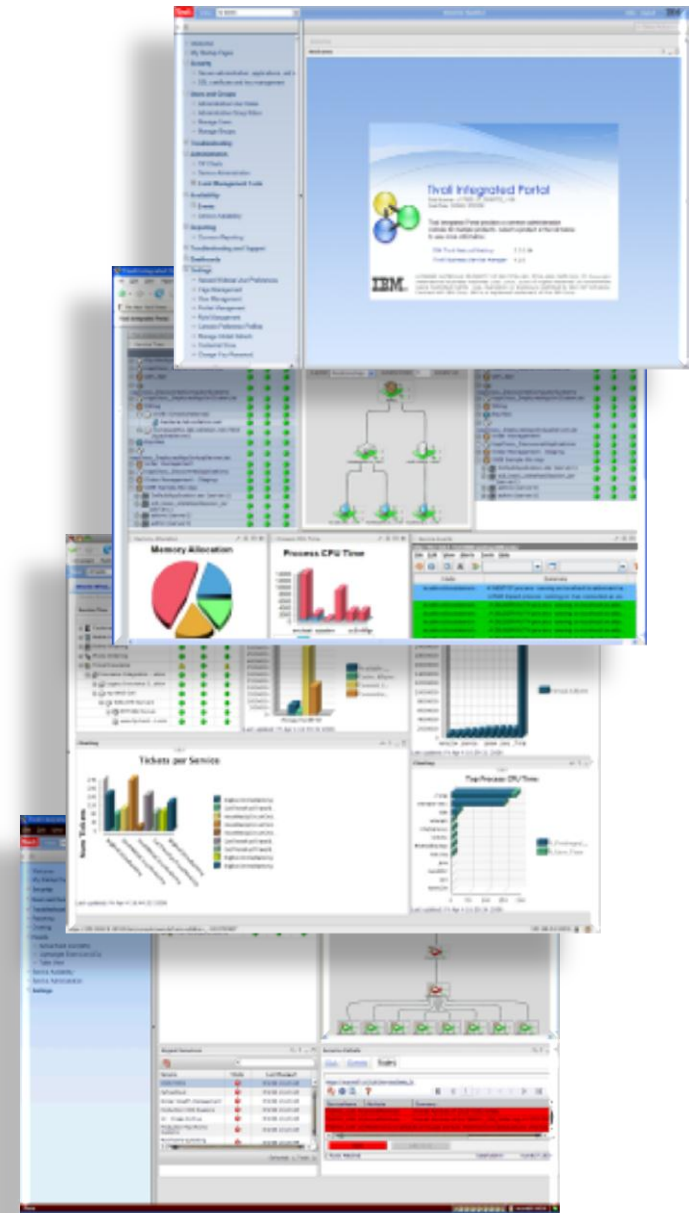
- **Infrastructure**
 - Freeform Page Creation
 - Widget Creation and Organization
 - Security Delegation
 - Dojo 1.6 (New widget support, new styling)
 - Inline Dojo support and Conditional Content Isolation
 - 64-bit support to enable performance optimizations for products
 - In-place upgrade from TIP 2.1 to TIP 2.2
- **Performance**
 - Javascript optimization
 - Inline Dojo support and Conditional Content Isolation
- **Capabilities**
 - Enhanced integration capabilities (event support) with TIP Charting
 - Extended BiDi support for iWidgets
 - Export/Import Support for new features
- **Enablement**
 - Tips for TIP





What this brings to our customers

- Customers can create dashboards through the runtime
 - Freeform layout option allows extremely flexible page creation options.
 - New eventing support in TIP Charts allows powerful dashboards to be created.
 - With out-of-the-box building blocks such as Image Widget, Web Widget, and TIP Charts, plus additional content from deployers, completely functional applications can be built in the UI.
- Customers have finer control over console resources
 - The ability to access, modify, create, delete, and more can be controlled on a per-resource basis.
- Customers can achieve better performance with rich content
 - Shared libraries and isolation techniques are used extensively by browser-side content, allowing better performance as well as compatibility.



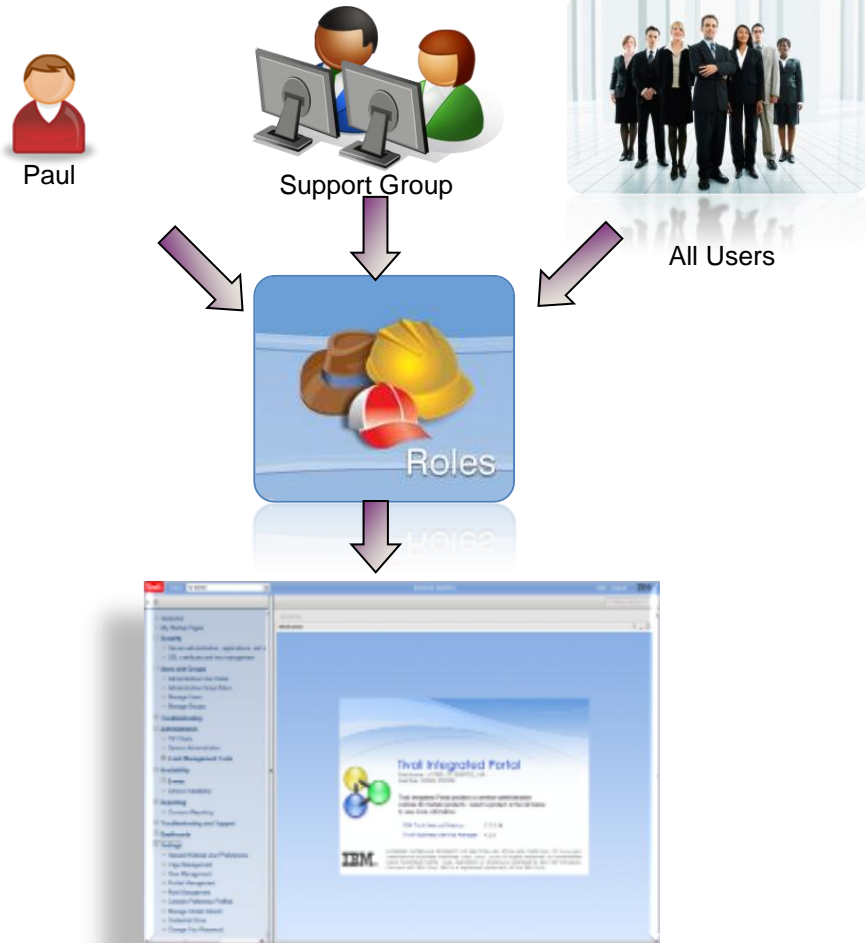


TIP Services at a glance

<p>Navigation</p> <ul style="list-style-type: none"> -Navigation Tree .Filter on roles, categories etc .Tasking .Form Persistence 	<p>Aggregation</p> <ul style="list-style-type: none"> -State and Server Maintained .Event Passing Client/Server .Client Side Aggregation .JSR 168 portlets and iWidgets .Widget catalog .configured widgets .Drag and Drop dashboard creation .Free form and grid based page 	<p>Administration</p> <ul style="list-style-type: none"> -Log/Trace -User/Group/Role Mgt. -Credential Store -Change Password -User/Group/Role Mgt. -Fine Grained Authorization -Smart Refresh -Preference Profile 	
		<p>Customization</p> <ul style="list-style-type: none"> -Login Page -Banner 	<p>Personalization</p> <ul style="list-style-type: none"> -User and admin preferences -Perspective (operator)
<p>Web 2.0</p>			
<p>ITM Integration Services</p> <ul style="list-style-type: none"> - TIP charting portlet 	<p>Integration with LMC</p> <ul style="list-style-type: none"> .Reuse enabler to support iWidgets 	<p>Common UI REST Service</p>	<p>Performance</p> <ul style="list-style-type: none"> .High Availability
<p>Deployment</p> <p>COI/DE based installer - Portal Application Archive</p>		<p>Security</p> <ul style="list-style-type: none"> - Authentication (LDAP, OS, File) - Authorization (Argus – TIP2.1) - Credential Mapping -integration with TAM 	



Roles Based Authorization



- All resources in TIP are protected by role-based authorization
- Roles can be granted to:
 - Users
 - Groups

Resources

- **Widget:**
 - A configurable piece of graphical user interface function, provided as an embeddable component
 - Can produce and consume events “on the glass”
 - Multiple instances may be on the same TIP page, each with a different configuration
- **TIP Page:**
 - A page consisting of a layout of widgets, their configuration, and an event flow between widgets
- **Palette:**
 - A collection of widgets that can be placed on a TIP page.
- **TIP View:**
 - A collection of pages
- **Preference Profile:**
 - A collection of views and some console wide settings



Security Delegation

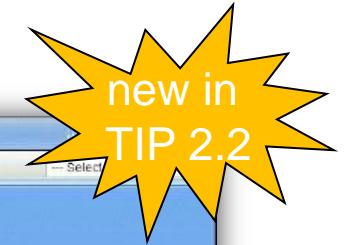
The ability to create and modify console resources requires additional control

Access Type	A portlet	A page	Manage Pages portlet	Manage Portlets portlet
User	View	View	View	View
Privileged User	Set user prefs	Resize layout	View	View
Editor	Set shared prefs, edit general properties	Enter edit mode, add / remove / position content	View	View
Manager	Edit config mode settings		Create and delete Pages	Create and delete Portlets





Freeform Layout



The screenshot shows the Tivoli Integrated Portal interface with a freeform layout. The interface includes a top navigation bar with 'View: All tasks' and 'Welcome tipadmin'. A 'Demo Page' tab is active. The main content area is divided into several sections:

- ServerSelection Details:** A large map of China with two green markers indicating server locations.
- Overview:** A smaller world map.
- Table:** A table showing server performance metrics.
- CPU Utilization:** Four green semi-circular gauges labeled Core 1, Core 2, Core 3, and Core 4.
- Checklist:** A list of services with green checkmarks, including Counter Service, Domestic Institutions, Online Banking, Internal Applications, Middle Business Platform, Tel-Banking Manual Service, Tel-Banking Voice Service, Bank Cards, Customer Information, Loans, Information Centers, Financial Checking, Financing, and Accounting. A 'Save' button is also present.

Server	CPU (%)	Memory (%)	Wait (%)
Tip24584	80 (90)	20 (30)	30
Tip_24453	20 (50)	02 (50)	0
ISC_22344	40 (60)	60 (60)	10

- Absolute positioning
- Transparency
- Backgrounds



Dashboard - Features



Views

Palette

Page

Widgets

Search to locate desired widget

Resize control

Paging Controls

Widget normal state

Widget hover state, click to add to current page

Widget drag and drop onto a page



Self-Service Dashboard (TIP 2.1/TIP 1.1 vs TIP 2.2)



Dashboard in TIP 1.1/ 2.1

Dashboard in TIP 2.2

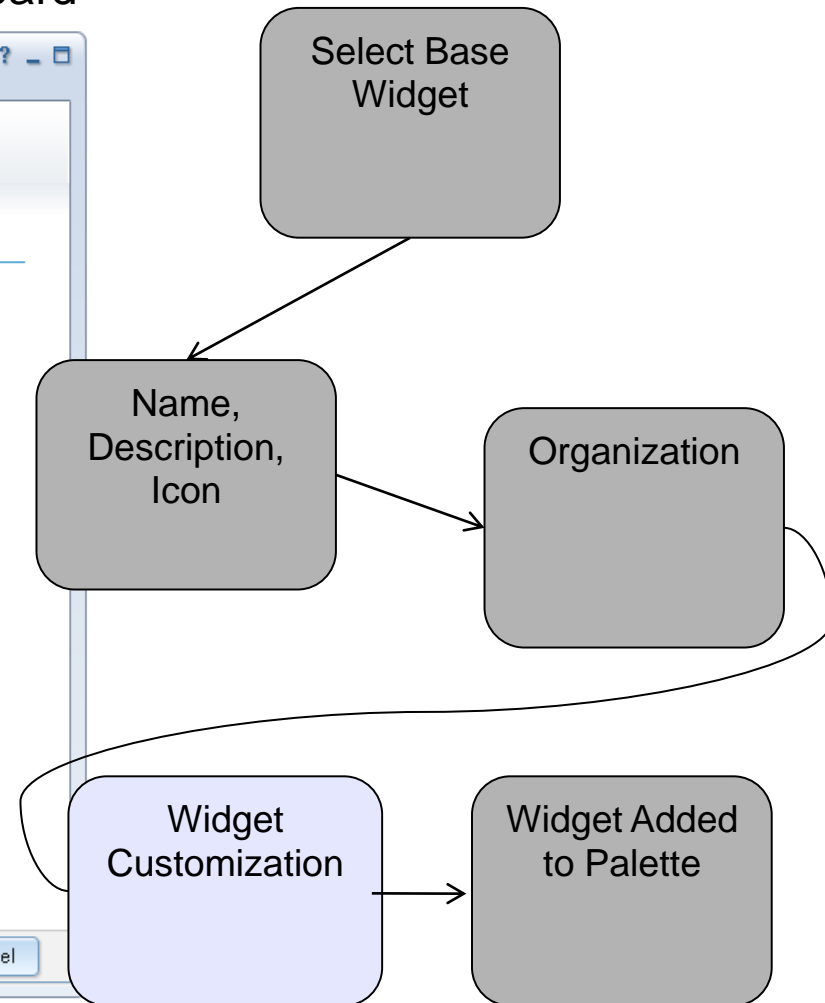
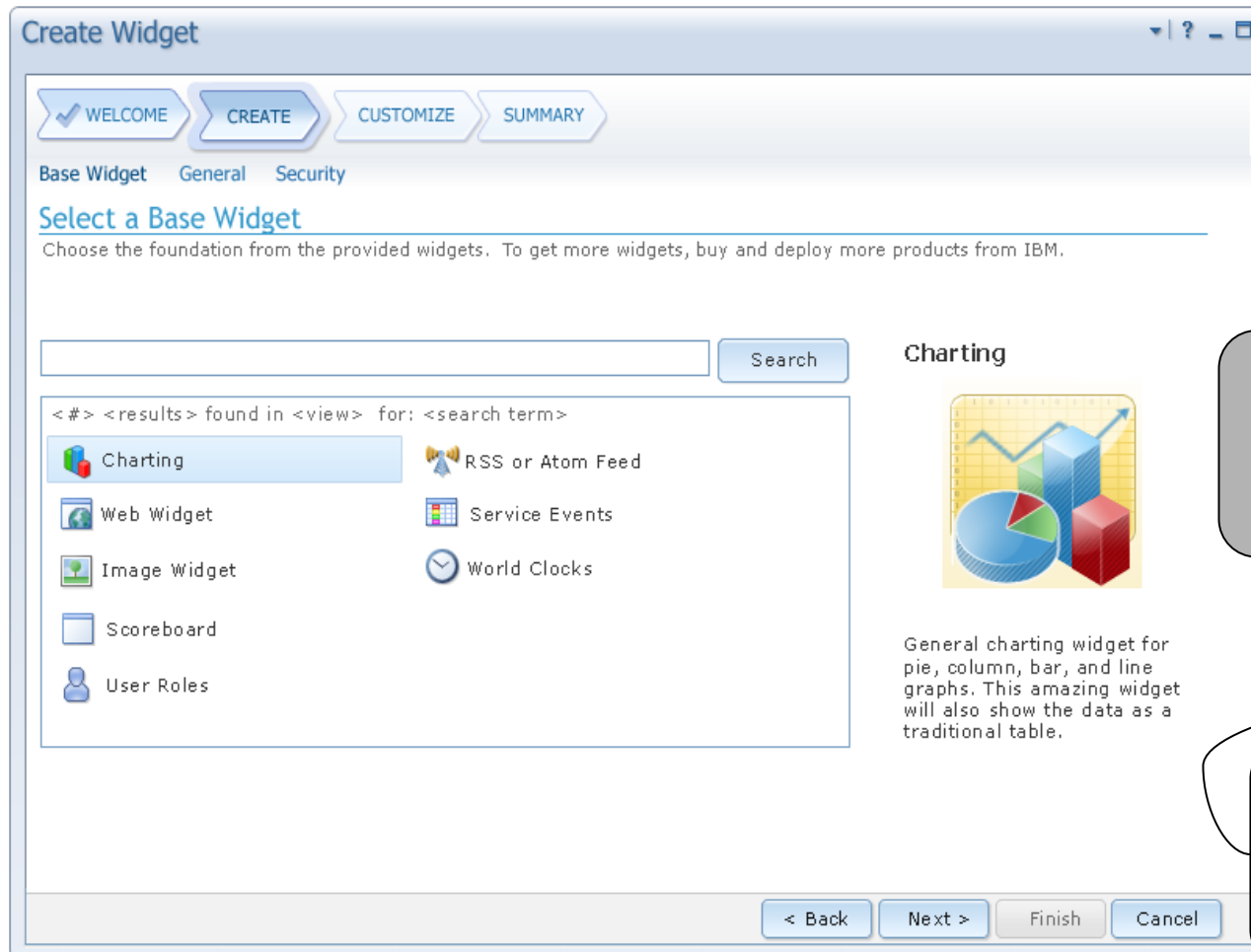




Time-to-Value with Widget Customization

Provide customers the capability to build customized widgets

Capability to customize a generic widget and save the customized widget, so other users can drag and drop customized widgets on the dashboard





Building Blocks: Image Widget

- Logos
- Images
- Icons
- Backgrounds
- Maps





Building Blocks: Web Widget

- Integrate external applications into TIP
- Pass context from TIP native content to external applications
- Integration between TIP and non TIP based applications



TSRM Help desk in TIP

The screenshot shows the Tivoli Integrated Portal interface. On the left is a navigation menu with categories like 'Home', 'Admin', and 'Availability'. The main content area is split into two sections. The top section is titled 'Active Event List (AEL)' and contains a table with columns: 'No.', 'Ack.', 'Handle', 'Risk', 'Appt Group', 'Summary', 'Last Occurrence', 'Cost', and 'Expire Time'. The table lists several events with status indicators (red, yellow, purple). The bottom section is a 'Google Maps' widget displaying a map of a city area.

This screenshot shows the Tivoli Integrated Portal with the 'TSRM Help desk' widget integrated. The 'Active Event List (AEL)' table is visible at the top, showing event details. Below it, the 'Helpdesk' widget is displayed, featuring a search bar, a 'New Process Request' button, and a table for tracking requests. The table has columns for 'Description', 'APP', 'DESCRIPTION', 'STATUS', 'PRIORITY', and 'Mark'. The interface also includes a navigation menu on the left.

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Wiring of widgets

Publish and subscribe to events

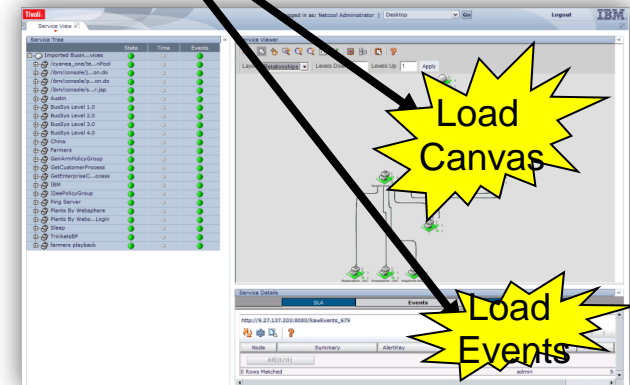
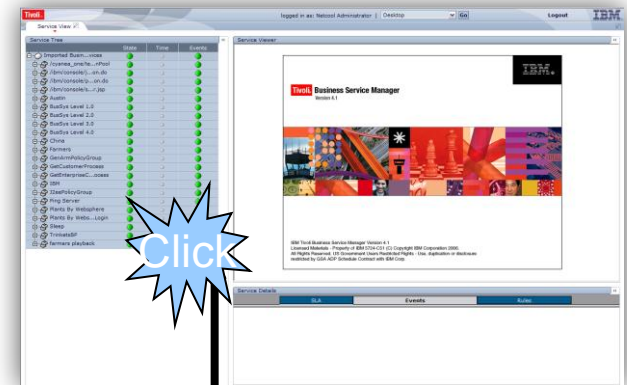
- ❑ Allows products to dynamically update based on actions in other portlets/iWidgets
- ❑ Portlets/iWidgets can be on the same page or on different pages
- ❑ Customers can create custom “wires” to control how events are sent if desired

Automatic Wiring

- ❑ Events are automatically sent between widgets on the same page
- ❑ Widgets must understand the same event formats (pre-integration)
- ❑ Wiring is handled independent of widgets as part of the page rendering runtime
- ❑ Implicit wiring is enabled
 - ❑ between portlets, between iwidgets and between iwidgets and portlets

Custom or Explicit wiring:

- ❑ Users control the flow of events on the page between widgets
- ❑ Wiring is handled independent of widgets as part of the page rendering runtime
- ❑ Supports transformations





Extendable Capability for BP's and OEM's

Provide the capability to customize their management UI to a familiar look and feel for the customers

The screenshot shows the Tivoli Integrated Portal interface with several annotations:

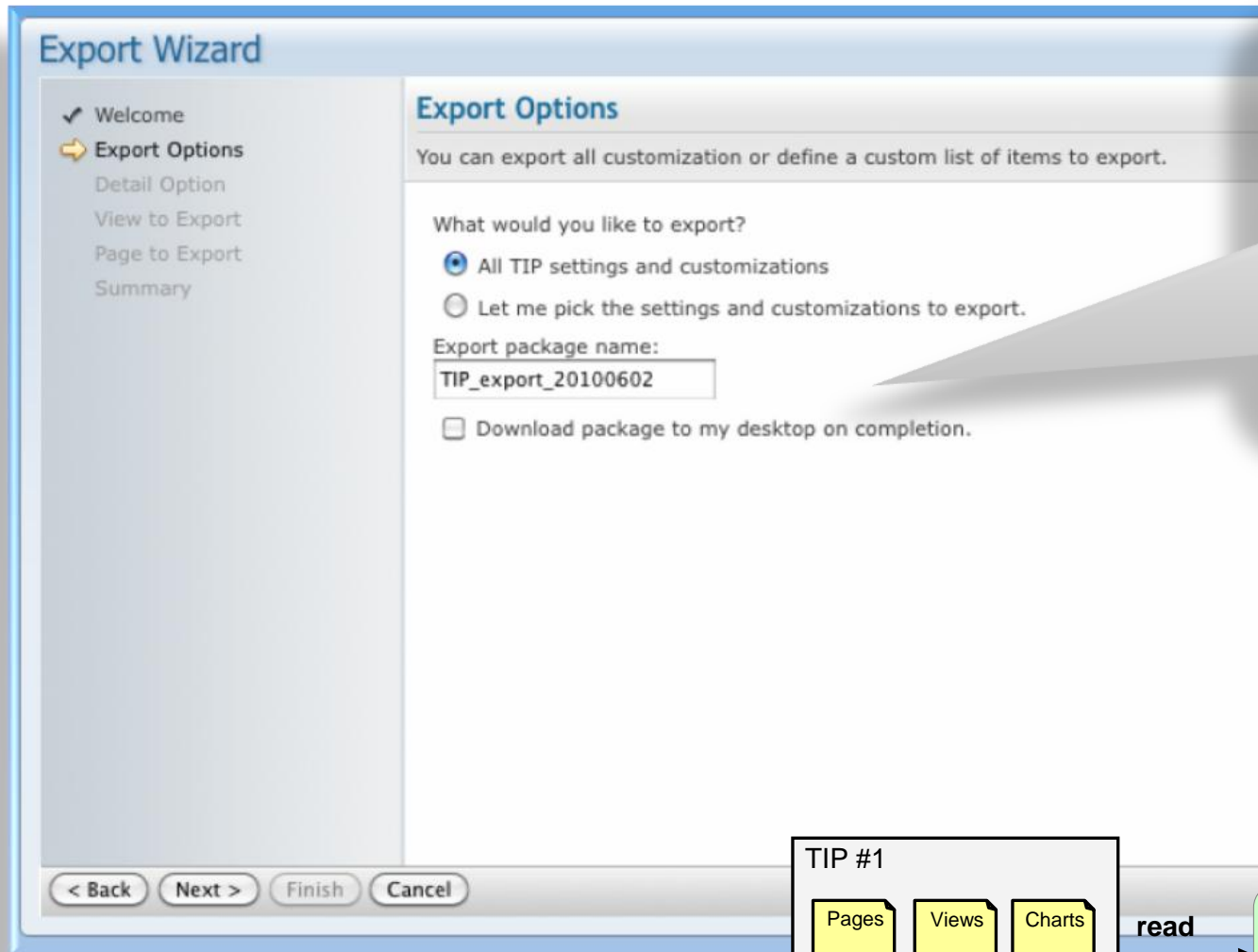
- Customer Logo:** A blue callout box pointing to the 'ABC' logo in the top right corner of the page header.
- Customer Title:** A blue callout box pointing to the 'ABC' logo in the top left corner of the page header.
- Customer Look & Feel:** A large blue callout box pointing to the overall layout and styling of the portal.
- 3rd party Content:** A red callout box with an arrow pointing to a table of service details in the bottom right pane.

ServiceName	Attribute	Summary
TBSM31_LOB: 40 OverallAttribute		Overall Attribute of CICS-TORS is Bad.
TBSM31_LOB: 40 OverallAttribute		Overall Attribute of the TBSM31_LOB_Folder tag of CICS-TOR
TBSM31_LOB: 40 TBSM31IncomingStat	Event based attribute TBSM31IncomingStatusRule1 of templa	

TIP 2.2 customization guide at <https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/communityview?communityUuid=26d4aa47-4fd6-460d-a93b-3ee8945324d6>

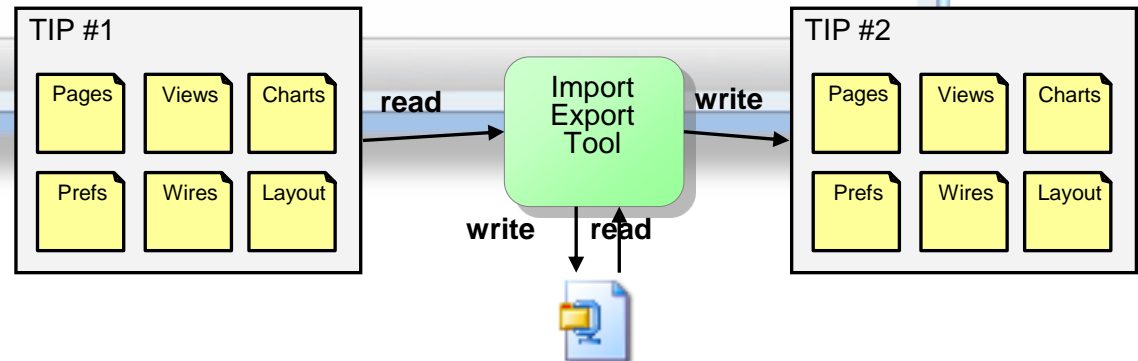


Customers can move TIP resources from staging to production



Administrators can export their TIP pages and settings via an easy to use wizard.

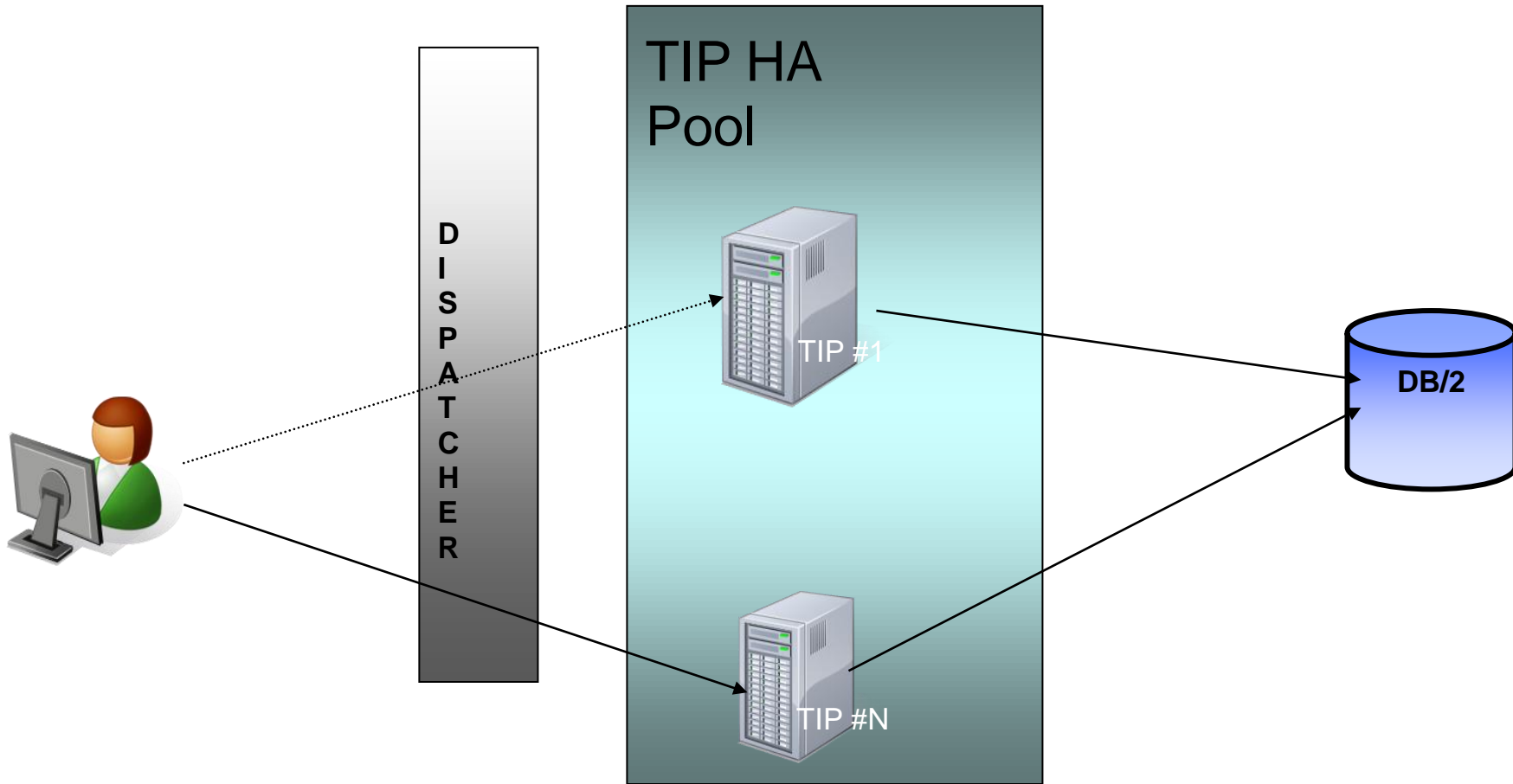
Settings can be imported into another TIP environment. Administrators can export everything or customize what is exported.





Load Balancing

A central database is used to replicate data across TIP servers in the pool

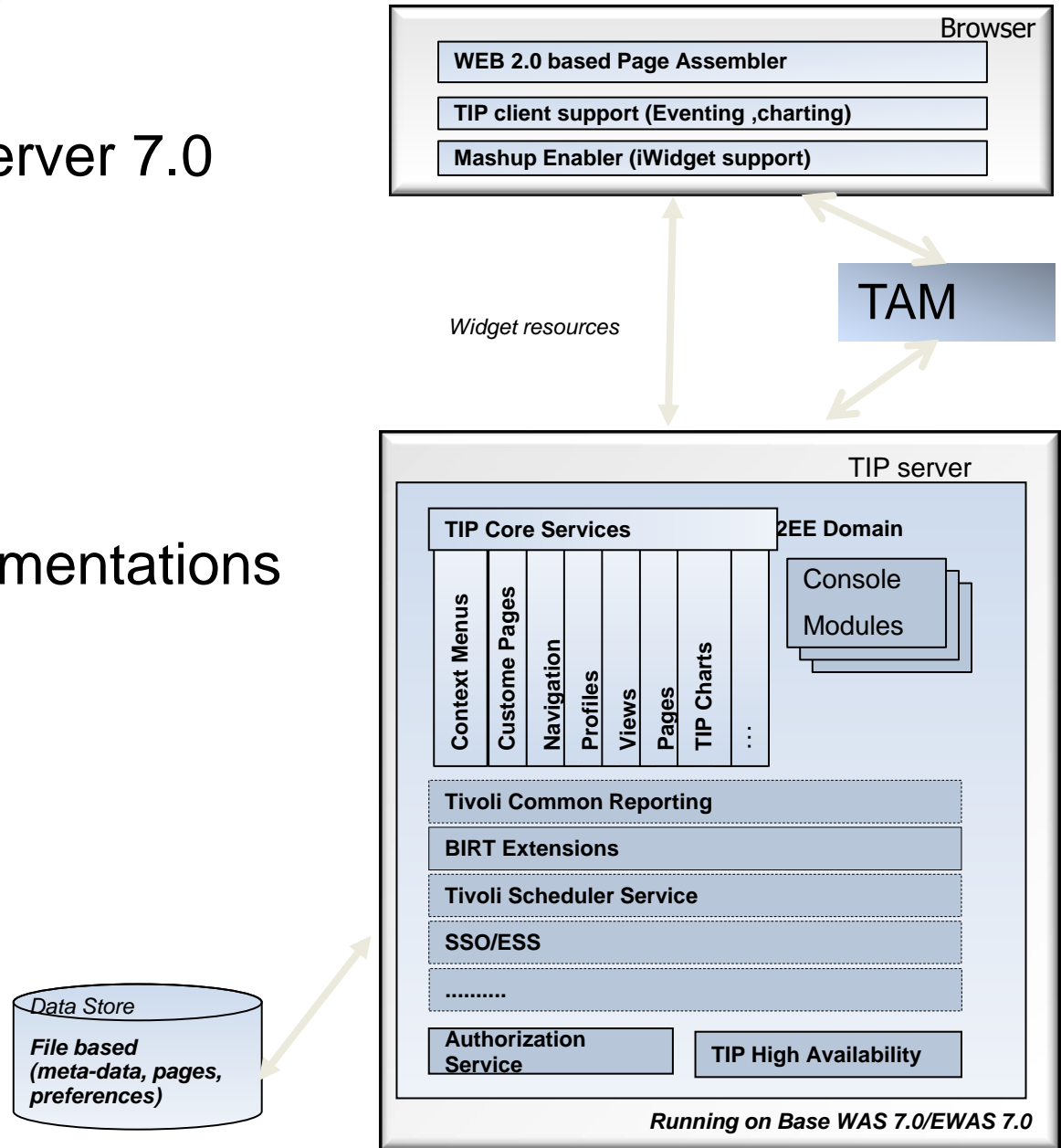


<https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/communityview?communityUuid=26d4aa47-4fd6-460d-a93b-3ee8945324d6>



TIP Architectural Overview

- .WebSphere Application Server 7.0
- .Core Services
- .Optional Components
- .Client side WEB 2.0 implementations
- .High Availability





TIP Performance (from 2.1 to 2.2)

✓ Improved **install**

- 8 minutes (Linux)



✓ Improved **response time**

- Login response time decreased by 80% (from TIP 1.1)
- Sub-second response time for common TIP interaction
- 3x improvement in tab switching!



✓ Improved **charting response**

- 40% - 50% improvement in page response time with 5 charts

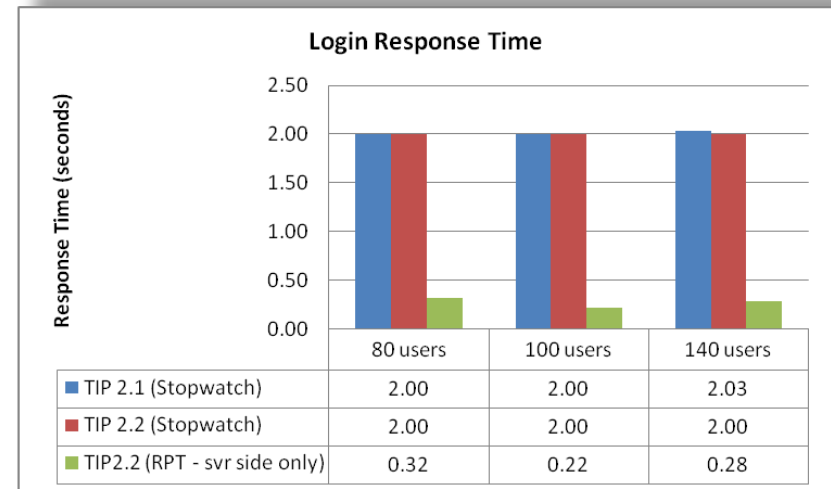


✓ Improved **CPU utilization**

- 10% improvement in CPU utilization

✓ Improved **concurrent user support**

- Scales up to 140 concurrent users with 80% operator and 20% administrator scenarios on a low end system configuration
- Increasing the number of concurrent users in future performance iterations.

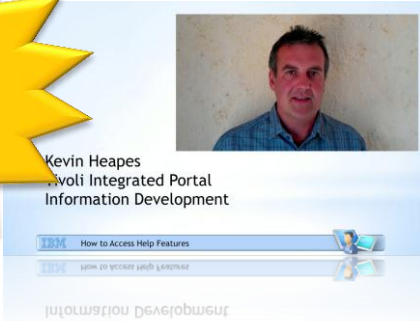




TIP on developerWorks

Interactive forums, blogs, technical whitepapers, videos, and more

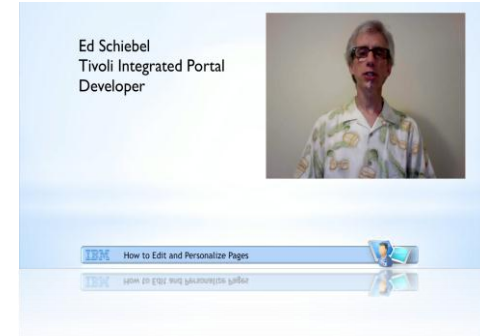
<https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/communityview?communityUuid=26d4aa47-4fd6-460d-a93b-3ee8945324d6>



Kevin Heapes
Tivoli Integrated Portal
Information Development



Sudhindra Rao
Tivoli Integrated Portal
Security Developer



Ed Schiebel
Tivoli Integrated Portal
Developer



Kapil Bhandari
Tivoli Integrated Portal
Developer

"This was badly needed. Thanks!"
Dan Needles, Netcool Customer

"Agree these videos are excellent: I like the modular approach! " –
Daryl Pereira (DeveloperWorks Web and Social Media Manager)

"I just came across the video you created on DeveloperWorks showing how easy it is to create a new page. I was pleasantly shocked. It not only looks beautiful, but it looks like its easier to use and cooler than many of the Google/Yahoo-esque type sites. The transparent background was a particularly nice touch! Nice work!!!"

Shoel Perelman, Director of Development, Industry Software Solutions



Tom Evans
Tivoli Integrated Portal
Developer



Srikanth Vedanthi
Tivoli Integrated Portal
Developer



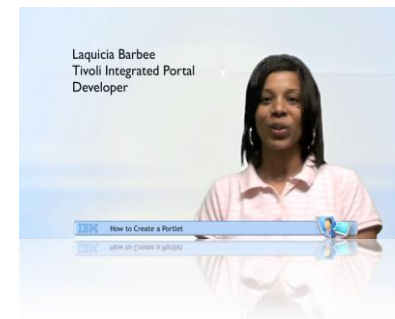
Adam King
Tivoli Integrated Portal
Quality Assurance Lead



Hao La
Tivoli Integrated Portal
Install Developer



Joshua Allen
Tivoli Integrated Portal
User Interface Lead

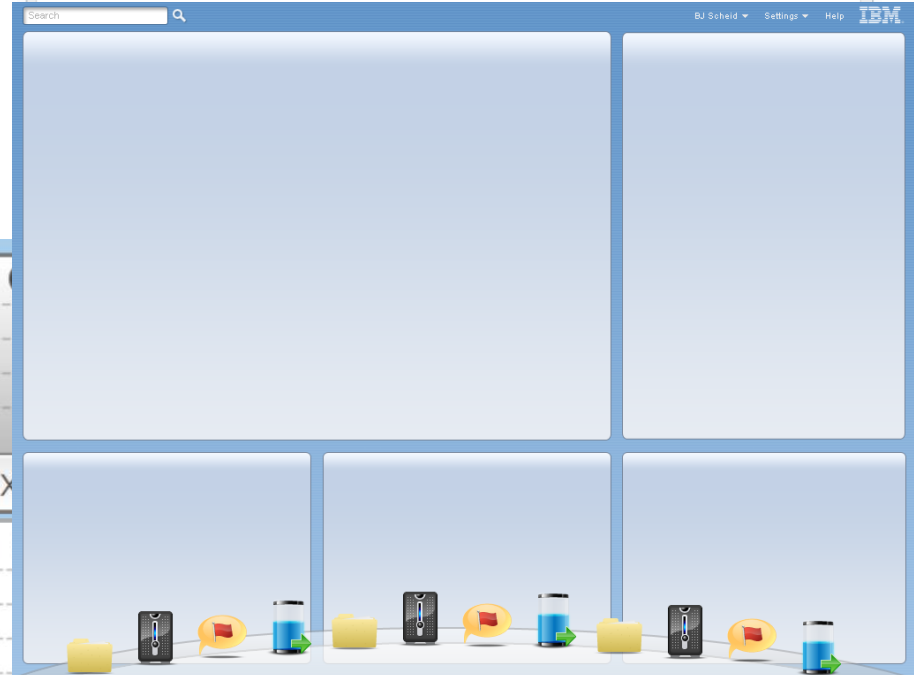
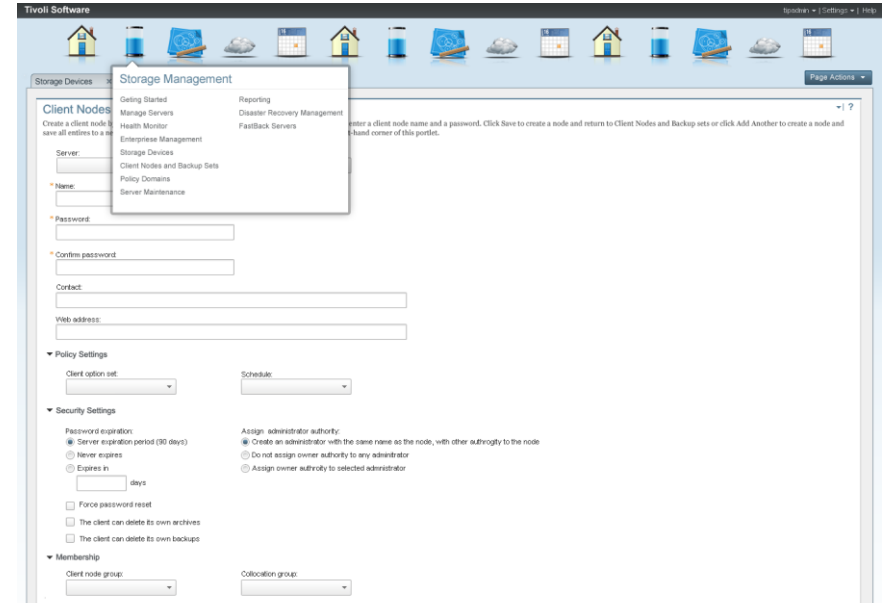


Laquicia Barbee
Tivoli Integrated Portal
Developer



TIP Roadmap contd.

- Improve UI
- Enhanced Building Blocks
 - Hotspot Widget
 - 3rd Party Widget
 - Gauges
 - more
- Security Self-Care
- Layout Enhancements and Theming



Status Gauges

001ms 050ms 100ms

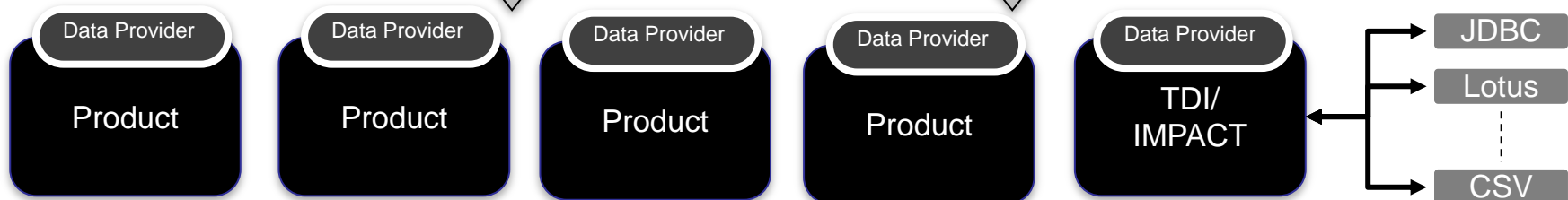
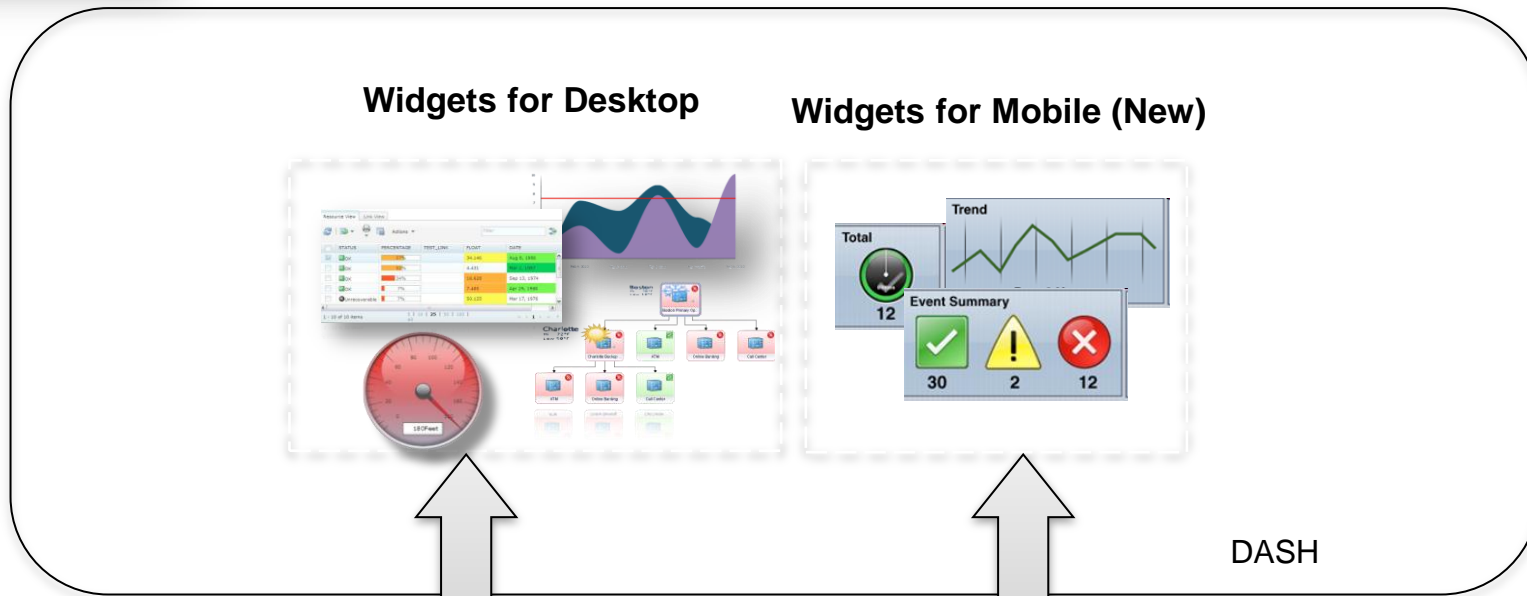
The image shows a grid of storage status widgets for IBM 8767 L2X servers. Each widget displays the following data:

Total Space	500	✓
Total Usg	432	
Space Util	86%	
Status	OK	
Total Space	500	

The widgets are color-coded: green for 'OK', yellow for 'Warning', and red for 'Error'. The status 'OK' is shown with a green checkmark, 'Warning' with a yellow triangle, and 'Error' with a red X.



DASH - Architecture





Keeping shared environment FIT

WHY FIT?

- **Problem:** How do we ensure product and component compatibilities when product and TIP fix-packs are installed in a shared environment (multiple products using the same TIP instance)?
- **Problem:** Customers have requested stand-alone TIP fix-packs (TIP fix-packs outside of product fix-packs). Product teams need to certify against TIP fix-packs on their own schedules. How do we coordinate this certification across different products and release schedules?
- **Problem:** TIP will need to do a major upgrade of it's Dojo (JavaScript UI) component this year in order to maintain Firefox browser compatibility. This could break products that do not certify against this Dojo upgrade.



Shared TIP Environments

BSM

- . TBSM
- . Omnibus
- . ITNMIP
- . ITNPM
- . ITNCM
- . Impact
- . TCR
- . zEnterprise Monitoring
- . TPC
- . TSAA
- . TUAM
- . ITCAM for
- . VE
- . MS App
- . EM

Storage

- . TSM
- . TSM Fastback
- . TCR

Security

- . RaPM
- . TSPM
- . TCR

Others Not Shared

- . TWS
- . TCR

- . TKLM

- . LMT
- . TCR

- . WAMC



Quality Certification

How we ensure delivery of high-quality Fix Packs?

1 Product teams will certify on TIP Fix Pack

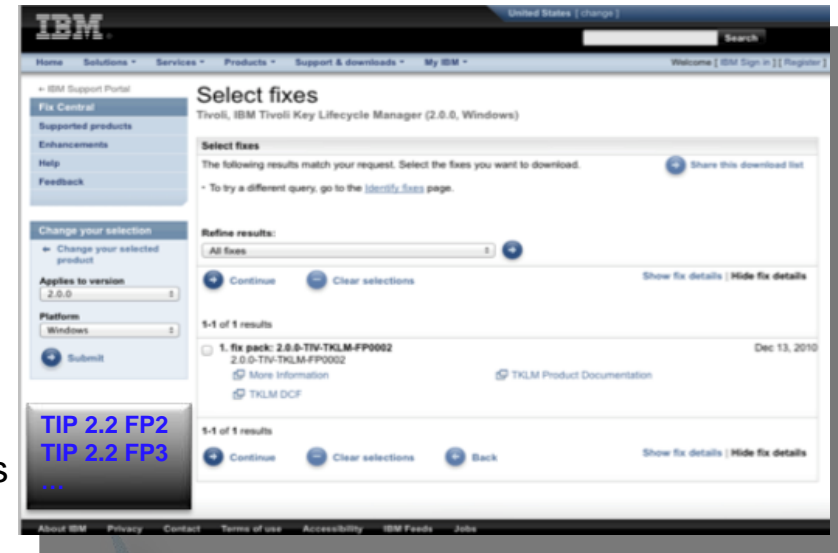
- ✓ Fix Pack will be regression tested by product teams
- ✓ Different teams may certify at different times

2 TIP Fix Pack will be posted to Fix Central

- ✓ Fix Central is an external website for customer downloads
- ✓ Certification file will be updated as teams certify

3 Customers can download FP from Fix Central

- ✓ TIP Fix Pack can be applied to a TIP (without product install)
- ✓ Updates to the certification will not affect content of Fix Pack



- Download FP
- Apply FP to TIP

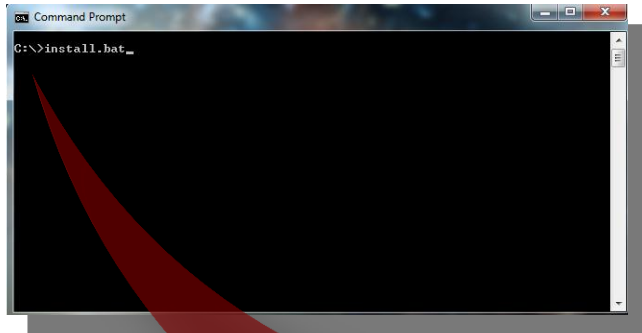
Important Note: TIP Fix Packs will not install on top of uncertified TIP environments



Intelligent Fix Packs – What to Expect

- Built-in intelligence with TIP 2.2 feature-pack and all TIP Fix Packs on TIP 2.2+
- Command-line driven (no UI)
- Ability to analyze the environment to determine if it is certified without installing

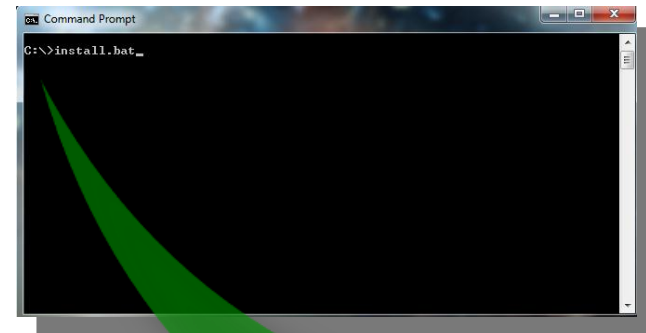
Fix Pack install - FAIL



Run command-line to install Fix Pack

- One of the products running in TIP is not certified
- Fix Pack install will **stop**
- A report will be generated, indicating which product(s) need to be certified for Fix Pack install

Fix Pack install - PASS



Run command-line to install Fix Pack

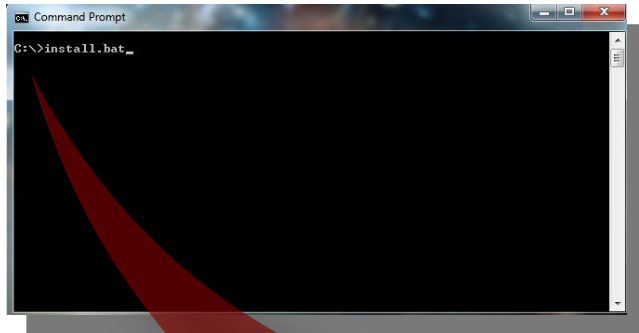
- All products within TIP are certified
- Fix Pack install will **continue**
- No product required for installation



Intelligent Fix Packs – What to Expect (Continued)

- Built-in intelligence with TIP 2.2 feature-pack and all TIP Fix Packs on TIP 2.2+
- Command-line driven (no GUI)
- Ability to analyze the environment to determine if it is certified without installing

Fix Pack install - FAIL



Sample Report Contents on a Failure with Uncertified Products

```
C:\Projects\Working\buildimage\2.2.0.1\r1\FIT\cdimage.featurepack>install.bat -i silent -f sample_response.txt
*****
Tivoli Integrated Portal 2.2.0.1 FeaturePack Installation
*****
Installed product B 3.9.0.0 is certified with tip2.2.0.1.
Installed product A 6.1.0.0 is not certified with tip2.2.0.1. Certified versions:6.2.0.0
Installed product C 7.3.1.0 is not certified with tip2.2.0.1. Certified versions:7.3.1.1,7.3.1.2
Installed product E 5.1.0.0 is not certified with tip2.2.0.1. Certified versions: Call IBM support.
ACTION: Install the product A,product C,product E certified versions and retry.
```



Solution: TIP Fix-pack Intelligence Tool (FIT)

- Process helping users to make smart decision when applying a TIP fix-pack in a shared environment (multiple products using the same TIP instance)
- Leverage existing TIP registration foundation introduced since TIP 2.1
- Without FIT you can't install a TIP feature-pack

```
C:\WINDOWS\system32\cmd.exe

C:\IBM\tivoli\tipv21_GA2\profiles\TIProfile\bin>tipRegister.bat -showAll
56b937d728fc47378e806272cb4fcd1c,product A,C:\,6.1.0.0,product,none,false
4c7758c621474baeab88292dc1ef78eb,product B,C:\,3.9.0.0,product,none,false
eaa363c2bf01430dbdc317e44aee68f8,product C,C:\,7.3.1.0,product,none,false
4fech0d1526c48889a57623c05842c3f,product E,C:\,5.1.0.0,product,none,false

C:\IBM\tivoli\tipv21_GA2\profiles\TIProfile\bin>
```



FIT: Assumptions and High Level Design

- Assumption
 - Components/products will perform registration with TIP via tipRegister command
 - No bells and whistles: no translation (ie GVT, TVT) and no accessibility
- Design
 - ❖ FIT vehicle comprised of 3 parts
 1. “Intelligent” engine (java)
 - Code leverages existing tipRegister.bat|sh, compares against signature file’s content and reports overall status of certification
 2. Signature file (input)
 - One per fix-pack with a well-defined naming convention and format
 - One product per line with comma separator
 - Always contains the latest certification of a product against a TIP fix-pack
 3. Output
 - Contains simple result per product and suggests a proper action
 - ❖ Internal FIT lifecycle
 1. Best treated as a single utility in its own release
 2. Has own lifecycle for easier maintenance in CMVC, but is only refreshed along with a fix-pack cycle externally



FIT Engine

- Uses Java to process the provided certification data
- Current input
 - Install location of TIP instance (no user action required)
 - The location of the signature file (no user action required)
 - Bypass flag to disable the entire certification process (not publicly advertised & should only be used if TIP Fix-pack being embedded by deployer's installation)
- Internal algorithm
 - Parse for TIP_HOME from the given response file
 - Locate signature file
 - Process and perform comparison based on data collected from signature file and installed products
 - Produce output
- Output
 - Standard Out: If any FIT test fails messages will be shown. If FIT passes, no messages will be shown
 - Standard Out: If `-fitReportOnly` flag is used, all messages will be shown regardless of PASS/FAIL
 - Log File: All output will be logged to `<TIP_HOME>/logs/fit_report.txt` regardless of PASS/FAIL
 - Return code:
 - Anything other than 0 signifying that the overall certification process is not successful
 - The Fix/Feature-pack installation could continue or not depends on if the bypass flag is used



Signature File

- For TIP 2.2.0.5 and subsequent releases, located in the signature directory inside the FIT.jar
- TIP L3 team will be responsible for updating and maintaining the signature files
- File naming convention: TIPFP_ **Version.Release.Maintenance.Fix**
- Each entry is on a single line: <UUID>, <product name>, <V.R.M.F>
- Every certified Fix-pack, Feature-pack of product is on single line (not iFix)



Signature File for FIT 2.2.0.9

- Contents of existing FIT 2.2.0.9 Signature File:

```
Version: tip2.2.0.9
Date: 2012-11-01 10:35:58
Build Number: tip2.2.0.9_fit_201211011034

#####
# Version in this file must comply with V.R.M.F
#####
#TCR
794E8319C86C03BF738766C436992A48, TCRStandalone, 2.1.1.0

#WebGUI
881364fa-1eea-11b2-ba91-8151493cbcf9, OMNIBusWebGUI, 7.3.1.0
881364fa-1eea-11b2-ba91-8151493cbcf9, OMNIBusWebGUI, 7.3.1.1
881364fa-1eea-11b2-ba91-8151493cbcf9, OMNIBusWebGUI, 7.3.1.2
881364fa-1eea-11b2-ba91-8151493cbcf9, OMNIBusWebGUI, 7.3.1.3
881364fa-1eea-11b2-ba91-8151493cbcf9, OMNIBusWebGUI, 7.3.1.4
881364fa-1eea-11b2-ba91-8151493cbcf9, OMNIBusWebGUI, 7.3.1.5

#TBSM
8DA4201AE37B4C459EA475F10947C716, TBSM, 6.1.0.1

#Impact
2290923BCD9A4CD9A7729113306DDF13, Impact, 6.1.0.1
```



General Use Cases

Use Case	Version of Product Installed/Registered	Signature file	Expected result (pass or fail certification)
1	6.1.0.0	6.2.0.0	Fail
2	5.1.0.0	N/A	Fail
3	7.3.1.0	7.2.1.9	Fail
4	3.9.0.0	3.9.0.0	Pass
5	N/A	7.0.0.0	Pass

Note: Comparison is made against all four digits



Test Statement

- TIP will always do FVT regardless if a product is embedding or not.
- Product embedding TIP fix-pack: When a product embeds they will always do an SVT. They need to still register with TIP (for migration purposes later on when we move off from DE), but they will be able to bypass FIT.
- Products certifying against TIP fix-pack: Product team will also do an SVT and register with TIP. TIP will update the signature file with the products' registry info so the fix-pack will install in their customer's environments when downloaded from Fix-Central.



Output

- Simple and clear message displayed to user on the command prompt
- Similar output will also be available under TIP_HOME/logs: fit_report.txt
- Result for each product is produced on a single line with overall required action
 - Installed product **C 7.3.0.1** is certified with TIP **2.2.0.1**.
 - Installed product **A 6.3.1.0** is not certified with TIP **2.2.0.1**. Certified versions: Call IBM support.
 - Installed product **B 3.9.0.0** is not certified with TIP **2.2.0.1**. Certified versions: **3.9.0.1, 3.9.0.2**.
 - ACTION:** Install the product **A, B** certified versions and retry.



Example Output

- Scenario: Trying to install TIP 2.2.0.5 without first installing FIT 2.2.0.5

```
[tbsm61@nc9037038120 cdimage.fixpack]$ ./install.sh /opt/ibm/java-i386-60 ./sample_response.txt
```

```
*****
```

```
Tivoli Integrated Portal FixPack 2.2.0.5 Installation
```

```
*****
```

```
ACTION: Extract the 2.2.0-TIV-TIP-FITSuit-FP0005.zip to /home/tbsm61/IBM/ttipv2/profiles/TIPProfile/etc
```



Example Output

- Scenario: Trying to install TIP 2.2.0.5 onto uncertified products:

```
[tbsm61@nc9037038120 cdimage.fixpack]$ ./install.sh /opt/ibm/java-i386-60 ./sample_response.txt
```

```
*****
```

```
Tivoli Integrated Portal FixPack 2.2.0.5 Installation
```

```
*****
```

```
FAIL: Installed ITNM 3.9.0.47 is not certified with tip2.2.0.5.Certified vs: Call IBM support.
```

```
FAIL: Installed TCRStandalone 2.1.1.0 is not certified with tip2.2.0.5.Certified versions: Call IBM support.
```

```
FAIL: Installed TBSM 6.1.0.0 is not certified with tip2.2.0.5.Certified versions: Call IBM support.
```

```
FAIL: Installed OMNIBusWebGUI 7.3.1.0 is not certified with tip2.2.0.5.Certified versions: Call IBM support.
```

```
ACTION: Install the ITNM,TCRStandalone,TBSM,OMNIBusWebGUI certified versions and retry.
```

```
[tbsm61@nc9037038120 cdimage.fixpack]$ /home/tbsm61/IBM/tivoli/tipv2/profiles/TIPProfile/bin/tipRegister.sh -showAll |  
grep product
```

```
881364fa-1eea-11b2-ba91-bcf9,OMNIBusWebGUI,/home/tbsm61/IBM/tivoli/netcool/omnibus_webgui,7.3.1.0,product,none,false
```

```
7D8579E3-7FC7-47E7-91C7-C561F2D28652,ITNM,/home/tbsm61/IBM/tivoli/netcool/precision,3.9.0.47,product,none,false
```

```
8DA4201AE37B4C459EA475F10947C716,TBSM,/home/tbsm61/IBM/tivoli/tbsm,6.1.0.0,product,none,false
```

```
794E8319C86C03BF738766C436992A48,TCRStandalone,/home/tbsm61/IBM/tivoli/tcr,2.1.1.0,product,none,false
```



Example Output

- Scenario: Run the FIT tool without actually trying to install the fix-pack:

```
./install.sh -i silent -j /opt/ibm/java-i386-60 -f ./sample_response.txt -fitReportOnly true
```

```
*****
```

```
Tivoli Integrated Portal FixPack 2.2.0.5 Installation
```

```
*****
```

```
FAIL: Installed ITNM 3.9.0.47 is not certified with tip2.2.0.5.Certified vs: Call IBM support.
```

```
FAIL: Installed TCRStandalone 2.1.1.0 is not certified with tip2.2.0.5.Certified versions: Call IBM support.
```

```
FAIL: Installed TBSM 6.1.0.0 is not certified with tip2.2.0.5.Certified versions: Call IBM support.
```

```
FAIL: Installed OMNibusWebGUI 7.3.1.0 is not certified with tip2.2.0.5.Certified versions: Call IBM support.
```

```
ACTION: Install the ITNM,TCRStandalone,TBSM,OMNibusWebGUI certified versions and retry.
```

```
./install.sh -i silent -j /opt/ibm/java-i386-60 -f ./sample_response.txt -fitReportOnly true
```

```
*****
```

```
Tivoli Integrated Portal FixPack 2.2.0.5 Installation
```

```
*****
```

```
PASS: Installed ITNM 3.9.0.47 is certified with tip2.2.0.5.
```

```
PASS: Installed TCRStandalone 2.1.1.0 is certified with tip2.2.0.5.
```

```
PASS: Installed TBSM 6.1.0.0 is certified with tip2.2.0.5.
```

```
PASS: Installed OMNibusWebGUI 7.3.1.0 is certified with tip2.2.0.5.
```

```
ACTION: No action required.
```



Example Output

- Scenario: Run the install, disabling the FIT checker. Product teams will use this flag when they consume a TIP fix-pack into their fix-pack, and a test effort is done at that time, they will need to contact TIP L3 for the syntax for the actual flag.
- There are also might be cases where a customer would need the disable flag. An individual product's dev/L3 team would have to make the decision if this should be done.

```
./install.sh -i silent -j /opt/ibm/java-i386-60 -f ./sample_response.txt [ disable flag would go here ]
```

```
*****
```

```
Tivoli Integrated Portal FixPack 2.2.0.5 Installation
```

```
*****
```

```
Preparing SILENT Mode Installation...
```

```
=====
```

```
GenericInstaller          (created with InstallAnywhere by Macrovision)
```

```
-----
```

```
[ installation continues.... ]
```




Example Output

- Scenario: Run the install, FIT passes – There will be no FIT related output. For actual results, check <TIP_HOME>/logs/fit_report.txt

```
./install.sh -i silent -j /opt/ibm/java-i386-60 -f ./sample_response.txt
```

```
*****
```

```
Tivoli Integrated Portal FixPack 2.2.0.5 Installation
```

```
*****
```

```
Preparing SILENT Mode Installation...
```

```
=====
```

```
GenericInstaller          (created with InstallAnywhere by Macrovision)
```

```
-----
```

```
[ installation continues.... ]
```



FIT Packaging

- Available on Fix Central in this format (ie 2.2.0.9 release): 2.2.0-TIV-TIP-FITSuit-FP0009.zip
- User can download it addition to a corresponding Fix/Feature-Pack image

<input checked="" type="checkbox"/>	1. fix pack: 2.2.0-TIV-TIP-FIT Suit-FP0009 → 2.2.0-TIV-TIP-FITSuit-FP0009	Nov 1, 2012
<input type="checkbox"/>	2. fix pack: 2.2.0-TIV-TIP-zLinux64-FP0009 → 2.2.0-TIV-TIP-zLinux64-FP0009	Oct 12, 2012
<input type="checkbox"/>	3. fix pack: 2.2.0-TIV-TIP-zLinux32-FP0009 → 2.2.0-TIV-TIP-zLinux32-FP0009	Oct 12, 2012
<input type="checkbox"/>	4. fix pack: 2.2.0-TIV-TIP-Windows64-FP0009 → 2.2.0-TIV-TIP-Windows64-FP0009	Oct 12, 2012
<input checked="" type="checkbox"/>	5. fix pack: 2.2.0-TIV-TIP-Windows32-FP0009 → 2.2.0-TIV-TIP-Windows32-FP0009	Oct 12, 2012



User Experience for FixPack 2.2.0.9 with built-in FIT

- Go to Fix Central
- Download 2 files
 - 2.2.0-TIV-TIP-FITSuit-FP0009.zip
 - 2.2.0-TIV-TIP-Windows32-FP0009.zip
- Locate the installed TIP 2.2 instance that needs upgrade on a machine
- Unzip the *_FITSuit-*.zip to TIP_HOME/profiles/TIPProfile/etc
- Unzip the FixPack image, locate the response file and **fill in** required information
- Start the installation using install.bat|sh
 - FIT fails → Installation will abort and print some summary on the prompt. Return code=1
 - FIT passes or FIT is disabled (in a Fix-pack) → Installation will continue and perform regular Fix-Pack installation process. Return code is determined by the regular Fix-Pack for this case.