WELCOME TO TIVOLI NOW!

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ITIM Express

One Size Does Not Fit All

Jason Wu
IBM Tivoli Global Response Team
What this session is about

- Introducing TIM Express
- How TIM and TIM Express solve today’s identity management challenges
- Demos
Tivoli Identity Manager provides heterogeneous account provisioning and user lifecycle management in the Tivoli Identity Management suite.

- **Federated Identity Management – FIM**
- **IBM Tivoli Access Manager – TAM**
- **IBM Tivoli Identity Manager Family – TIM**
- **IBM Tivoli Directory Integrator – TDI**
- **IBM Tivoli Directory Server - TDS**
One size doesn’t fit all: IBM offers a choice in Identity Management solutions to best meet customer needs

**ITIM**
- Automated provisioning/de-provisioning
- Closed loop remediation, plus recertification
- Highly scalable, with high availability options
- Extensible workflow, reporting, and APIs
- For enterprise and medium sizes customers with advanced needs

**ITIM Express**
- Request based provisioning
- Account recertification workflow
- All-in-one installer on single server
- Persona driven UI views and default settings
- For SMBs and departments/subsidiaries

**Systems Overview**

- **ITIM**
  - RDBMS
  - LDAP
  - Many platforms

- **ITIM Express**
  - Windows/Linux on IA32
  - Many platforms

**Integration**

- **Failover**
  - RDBMS
  - LDAP

- **WAS Express**
  - DB2
  - Other Adapters

- **Other Adapters**
  - ITDI

- **Other Adapters**
  - IDS

- **Other Adapters**
  - ITDI

*Note: Diagrams provide a visual representation of the integration and systems overview.*
ITIM 4.6 and ITIM Express 4.6 solve similar pains, but with different degrees of automation and security policy enforcement.

- **Functional segmentation is independent of company size, but does have some industry affinity**

- **The user provisioning approach a company uses is an evolving process**

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**Operational Labor Required**

*Request Based*

**Hybrid Approach**

*Policy Based*

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**Manual** → **Automated**

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<tr>
<th>Profile: Primarily Knowledge Workers</th>
<th>Profile: Mixed Workforce</th>
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<tbody>
<tr>
<td>Sample Industry: Computer Services</td>
<td>Sample Industry: Retail Banking</td>
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<tr>
<td>Sample Customer: IBM</td>
<td>Sample Customer: ING</td>
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<table>
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<tr>
<th>Profile: Primarily Homogeneous Workforce</th>
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<td>Sample Industry: Distribution</td>
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<td>Sample Customer: UPS</td>
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ITIM Express solves basic needs for SMBs or departments, while ITIM delivers a full enterprise class solution

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<tr>
<th>Customer Needs</th>
<th>ITIM Express 4.6</th>
<th>ITIM 4.6</th>
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<tbody>
<tr>
<td>Scalability and Availability</td>
<td>▪ Maximum 5,000 users&lt;br&gt;▪ Single server, no clustering&lt;br&gt;▪ Platforms: Linux, Windows on x86</td>
<td>▪ Well over a million users&lt;br&gt;▪ High availability and clustering&lt;br&gt;▪ Additional, high-end platforms (UNIX, z/Series)</td>
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<td>Provisioning</td>
<td>▪ Simple self-care, request-based provisioning</td>
<td>▪ Request-based provisioning*&lt;br&gt;▪ Role-based automated provisioning and de-provisioning&lt;br&gt;▪ Hybrid &amp; temporary (e.g. contractor)</td>
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<tr>
<td>Compliance</td>
<td>▪ Recertification to catch and deactivate noncompliant accounts&lt;br&gt;▪ Standard reports</td>
<td>▪ Automatically identify, alert, and correct orphan &amp; noncompliant accts.&lt;br&gt;▪ Restrict potential access based on job&lt;br&gt;▪ Ad-hoc &amp; Crystal Reports integration</td>
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<td>Business Process Customization</td>
<td>▪ Limited configuration&lt;br&gt;▪ “Standard way” / best practices</td>
<td>▪ Extensible workflows&lt;br&gt;▪ Supported APIs for integration&lt;br&gt;▪ “My way”</td>
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Lower help desk costs and improve user experience via self-care

- Challenge-Response reset for forgotten passwords – bypass costly help desk calls
- Define and enforce password polices across services – auto detect common rules
- Self-service synchronization of passwords and IDs across all systems
- Users may service all of their own attributes (address, title, etc)

ITIM
- Changes can be reviewed/approved via workflow
- Enforce custom password rules via Java module

ITIM Express
- Simple workflow
- Simple password policy
End user experience crucial to acceptance and time to value

ITIM: APIs for seamless integration   ITIM Express: Streamlined native interface
Streamline ad-hoc access requests, approvals and audits

- Reduce elapsed time to establish and remove accounts.
- Automate delegated or centralized decision-making process
- Reduce mundane data-entry tasks
- Achieve initial value quickly with minimal policy configuration

ITIM: Configurable to unique processes    ITIM Express: Pre-built common scenarios
Quickly produce comprehensive audit reports

- Predefined reports with filtering and security
- Centralized view of people and privileges
- Track access privileges by person
- Track access privileges by information resource
- Acrobat format for easy viewing and CSV format for custom analysis

ITIM only:
- Crystal Reports integration and support
- Ad-hoc report designer
- Additional standard reports
Analysts Affirm IBM Leadership in Identity Management

Gartner Group: ITIM Product Leadership

IDC: ITIM is Leader in Market Share

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## Customers Achieving Rapid Results

### Tivoli Identity Manager 4.6

**Company Profile**
- Apparel Maker
- 9,000 employee and contractor accounts

**Business Challenge**
- Compliance – Sarbanes Oxley
- Account Provisioning
- Business Process Customization - customized create, terminate and notification workflows and the design and configuration of about 20 IT infrastructure roles

**Deployment Profile**
- PeopleSoft HR, Active Directory, two RACF systems, over 20 Oracle instances and more than 60 HP and AIX UNIX servers

**Services**
- Under 3 months, business partner using 4 consultants

### Tivoli Identity Manager Express 4.6

**Company Profile**
- Business Services Company
- 1,500 corporate IT users

**Business Challenge**
- Provide complete and timely reports for audits
- Grow business without adding IT headcount

**Deployment Profile**
- Microsoft Active Directory
- Lotus Notes
- Tivoli Access Manager / Intranet Portal

**Services**
- In production in 5 calendar days
- 38 hours of services
Demonstration

- The ITIMx interface
- HR Feed
- Account Provisioning
- Approval workflow
- Reporting
- Password Management
- Re-certification
WELCOME TO TIVOLI NOW!

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IBM Tivoli Directory Integrator
…the quiet achiever

Ian Yip
Tivoli Security Specialist
IBM Software Group A/NZ
Abstract

Don’t be fooled by the name; IBM Tivoli Directory Integrator Express (TDIx) integrates anything – and is not in any way limited to directories. TDIx is a truly generic data integration tool that’s suitable for a wide range of problems that usually require custom coding and significantly more resources to address with traditional integration tools. The world is full of integration tools, so what makes TDIx special? It’s amongst the most agile, rapidly deployed and flexible integration environment you’ve ever seen. This session is for those that need to see it to believe it.
This session will...

Give you a brief overview of TDI concepts
Help you understand the value of TDI
Show you TDI in action
Be a little technical
Be informal...so relax!
This session will NOT…

Contain marketing slides
Make you a TDI expert
Tell you everything there is to know about TDI…in fact, we won’t even get close. There’s simply not enough time!
Agenda

Directory Integrator overview and concepts
Demonstration (fingers crossed that the flaky network connection stays functional)
Acronyms

TDI
TDIx
IDI
IDIx
ITDI
ITDIX
TIDI? (not really…)

Tivoli Now!
What is it really?

Is it a Meta-Directory? Sort of…
Is it a data synchronisation tool? Most definitely!
Is it a password synchronisation tool? It can be!
Is it a data integration tool? Of course it is!
Is it a development framework? If you want it to be!

The Swiss Army Knife of Data Integration!
In more technical geek speak, it is...

A real-time, event driven, general-purpose, data integration environment consisting of:

- A rapid development GUI for building and maintaining transformation and synchronisation rules
- A multi-threaded server that executes rules and monitors events
Architecture Components

**EventHandler**
The event-condition-action paradigm enables the system to respond to predefined events; thus enabling real-time integration.

**Parser**
Interprets and transforms the data flow the desired format

**Connector**
Connects to the relevant device, system or application and performs the required actions on the data, such as iterate, add, lookup, delete etc.

**AssemblyLine**
Executes the data integration flow based on the configuration of individual connectors, event handlers, parsers and the business logic driving the process.
AssemblyLine concept

Is a dataflow
Moves, copies, marshals and transforms data between systems
Has one or more input units to accept data
Has one or more outputs throughout the flow
A group of connectors performing various tasks
Example

- ID Authoritative Data Source for each Attribute
  - ITDI Assembly Line
  - ITDI Attribute Mapping

- Any Special Conditions or Business Requirements?
  - ITDI Scripting, Mode, Hooks, Branching/Loop Components

- Unique ID Between Sources
  - ITDI Link Criteria

\[
\begin{align*}
\text{cn} & \quad \text{Common name} = \text{First Name} + \text{Last Name} \\
\text{uid} & \\
\end{align*}
\]
Highlights

Event driven, general-purpose, data integration environment
Not dependent on a repository or centralised data model
Connects to a large number of protocols, API’s and formats
Workflow methodology
Particularly suited for integrating identity data across the enterprise
Highly extensible with JavaScript, VBScript and compiled Java
High Availability deployment capabilities and support
Web Services
Management (including JMX management framework support) and runtime deployment of TDI solutions
Much FASTER than traditional development!
A development example

2-3 weeks of development
3000-3500 lines of code
Can do the same with TDI in 1-2 days of development and MUCH less code
Demonstration: Yippy’s TDI Mashup

Requirement: I want to be able to get details and background information on types of events occurring at a given location during a given time period and have these displayed in a useful and user friendly way.
Mashup - a website or web application that combines content from more than one source

Google Earth (http://earth.google.com/)

Google (http://www.google.com)

Keyhole Markup Language (KML), is an XML grammar and file format for modelling and storing geographic features such as points, lines, images, and polygons for display in Google Earth.

Representational State Transfer (REST) is a software architectural style for distributed hypermedia systems like the world wide web. The term originated in a 2000 doctoral dissertation about the web written by Roy Fielding, one of the principal authors of the HTTP protocol specification, and has quickly passed into widespread use in the networking community. REST strictly refers to a collection of architectural principles. The term is often used in a looser sense to describe any simple interface that uses XML (or YAML, JSON, plain text) over HTTP without an additional messaging layer such as SOAP.
How will I do this? It’s the classic Mashup!

Search for events based on event type, location and date.

I found EVDB (http://evdb.com/) – they have a REST “web service” (http://api.evdb.com/)

Get some details and background information on each event (Google)

Display the events and locations in a useful way – what’s more useful than a “map-like” interface when it comes to locations (Google Earth)
Some technical specifics

TDI waits for a request via its own REST interface (a HTTP connector)

TDI gets event information from EVDB via EVDB’s REST service

TDI searches Google for relevant information on each event returned from EVDB

TDI responds to the original REST request with a KML file which can be opened using Google Earth
In Summary

Google Earth is cool!

TDI makes your life easier and integration projects much shorter

TDI facilitates integration innovation!
What to do next

Examine your internal projects and the time and costs involved – can TDI solve your integration issues quicker and make your development more easily maintainable?

Talk to your friendly Tivoli sales rep or technical specialist about how TDI can help solve your integration issues and dramatically reduce your development efforts and costs.
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