



Tivoli software

IBM Tivoli Configuration Manager

Highlights

- ***Deploy one solution for distributing software and patches throughout your heterogeneous environment that covers servers, desktops, mobile computing resources and pervasive devices***
- ***Automate complex deployments using workflows of captured best practices***
- ***Attain flexibility to support your environment and your processes***
- ***Drive automated compliance with your standards by using reference models***
- ***Integrate configuration management with a powerful, integrated inventory database***
- ***Manage systems inside and outside your corporate firewalls in a highly secure fashion***
- ***Minimize drain on bandwidth by leveraging streamlined distribution technology that scales to manage more than 100,000 endpoints***

With most IT staffs facing astronomical growth in the number and variety of IT assets and users, distributing software and data across the complex, heterogeneous environment in a secure, reliable fashion has become a monumental task. It's difficult to keep up with:

- *IT resources that change rapidly and are distributed across a geographically dispersed workforce.*
- *Security patches that come out frequently and must be installed rapidly across the enterprise to protect the IT environment.*
- *Frequent changes among employees and their roles that demand different kinds of IT resources to enable them to perform their jobs.*
- *Rapid growth in the number of unmanaged mobile and pervasive devices such as laptops and personal digital assistants (PDAs).*

Addressing these challenges with manual processes is inefficient, error-prone and costly. It drains the time of IT staff away from higher-value tasks. Organizations need a way to automate scheduling, submitting, monitoring and controlling software and patch distribution.

IBM Tivoli® Configuration Manager helps you gain total control over your enterprise software and hardware by performing distribution and installation of data, software and patches — and inventory management — in your multi-platform, distributed environment. Using Tivoli Configuration Manager, you can:

- *Scan hardware and software to determine which enterprise assets are part of your inventory.*
- *Minimize the time and effort of installing and configuring IT resources by centralizing and automating the distribution and installation of software across your enterprise.*
- *Automate and schedule your change management operations.*
- *Detect system and configuration changes.*
- *Manage to a defined model or state for your IT resources.*

- *Securely manage your enterprise environment across firewalls.*
- *Extend the scope of your managed environment to include mobile and pervasive devices.*

Manage software on servers, desktops and mobile devices throughout your organization

Because Tivoli Configuration Manager is platform agnostic, you can use its single, centralized solution to distribute software and patches across your complex, heterogeneous IT infrastructure. By using the same methods across all device types, your staff can maximize its productivity.

The package editor in Tivoli Configuration Manager helps you use a wide variety of available packaging technologies in a consistent fashion and allows you to standardize different package formats. You can easily build packages for installing commercial and internally developed applications to the wide variety of servers, desktops and devices throughout your enterprise. In essence, the package editor captures your best practices for installing a single software item — for reuse across the many diverse systems in your environment.

An increasing requirement is to handle the many mobile workstations like

laptops. Support for mobile devices is provided in a number of ways — from standard push to Web-based user pull. This allows you to tailor to your needs the way you manage laptops in your environment. Along with the provided Web server, based on IBM WebSphere® software, Tivoli Configuration Manager also provides IBM Tivoli Access Manager to tailor and secure access to the Web server functions.

Of particular note is that Tivoli Configuration Manager helps you manage — often for the first time — today's leading mobile enterprise devices, including those running Palm OS, Microsoft® Windows® CE, Windows Pocket PC and Nokia 9500 Communicator. And because you can update configuration information and software on these devices using the same interface as for your desktops and servers, your administrators do not need to master a new set of management skills.

Use workflows to automate your best practices

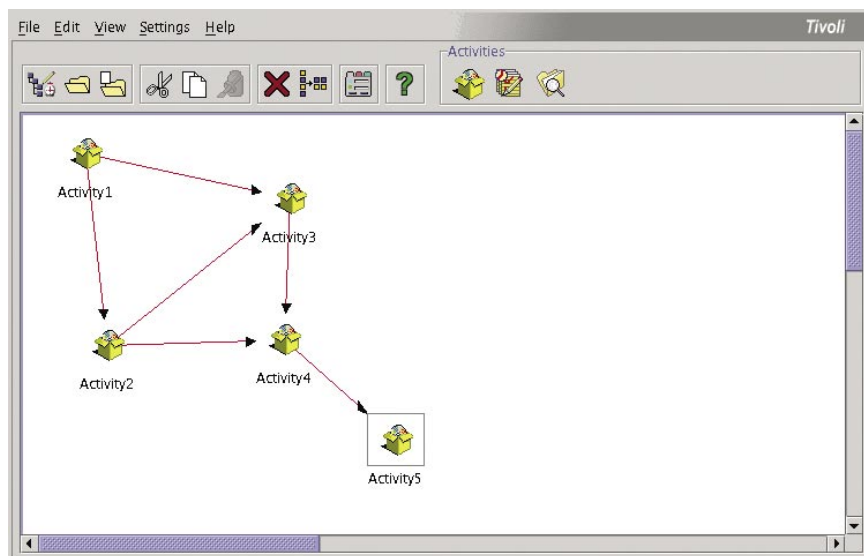
The Tivoli Configuration Manager activity planner enables you to combine one or more packages and automate the many steps in software and patch distribution and installation — and in inventory management — into a single

workflow that you would otherwise handle in a manual, more error-prone fashion. By using the activity planner, you are able to streamline the process of defining and scheduling your activities and can monitor the execution of those plans.

In the definition and scheduling phase, use the Tivoli Configuration Manager activity plan editor to:

- *Combine multiple packages into a single delivery process.*
- *Create a workflow (activity plan) that allows you to define dependency conditions for activities – so that you execute the activities only after other activities have completed – and generate a set of tree decision structures for execution.*
- *Manage a group of activities that originates from different applications as a single activity – from a single machine in the network.*
- *Schedule the activity plan to run on a specific day and time, repeat at specific time intervals or repeat indefinitely.*
- *Save activity plans in a database so you can reuse them across multiple resources in your enterprise and resubmit them at any future time.*

In other words, Tivoli Configuration Manager helps you capture and store



Activity plan editor facilitates creation of activity plans.

workflows that represent your best practices for distributing software and patches throughout your enterprise. By building a library of these activity plans, you create a resource that facilitates consistent, rapid execution that can be automated.

During the execution phase, use the Tivoli Configuration Manager activity plan monitor to:

- *Submit activity plans to be run and then control distribution with operations such as pause, cancel and resume.*
- *View the status, start time and completion time of all submitted activity plans – as well as a graphical representation of the plan (its activities and assigned targets).*

- *Restart an activity on an endpoint where the operation was unsuccessful.*
- *Delete plan status information from the activity plan database.*

Define your standards and automatically remediate to maximize compliance

Especially in large networks with complex requirements for different groups of users, workstations and devices, you can use Tivoli Configuration Manager to create reference models that further simplify software and patch distribution. A reference model specifies the desired state for each component. By subscribing users, groups of users, endpoints, pervasive devices, profile managers or inventory query results to a reference model, you establish the standard with which the subscribers should comply.

New features in Tivoli Configuration Manager, Version 4.2.2

Upgraded infrastructure

- Support for WebSphere, Version 5.1
- Support for IBM DB2®, Version 8.1
- Enhance Web gateway security with upgrade to Tivoli Access Manager, Version 5.1
- DB2 licenses included to use for gateway, depot and inventory databases
- Certified for Windows 2003 Active Directory

Enhanced and expanded support for pervasive devices

- Support for new Nokia 9500 Communicator intelligent phones, providing a scan of the device, device provisioning (Bootstrap), application deployment, device management (configuration) and notification using SMS
- Upgraded platform support for Palm OS, Windows CE, Windows Pocket PC; support software removal for Palm OS and Windows CE and execute program only for Palm OS

Enhanced the current functionalities

- Enhancements to the activity planner to maximize scalability and data integrity
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After you create a reference model using the Tivoli Configuration Manager change manager, the solution automatically creates a workflow (activity plan) for each subscriber. This activity plan includes all the tasks that must be executed for that particular subscriber to match the requirements defined in the reference model. The workflows are then automatically submitted to the activity planner, which delivers the plan and actions to the intended resources. When the plan and actions are completed, the inventory is updated to reflect that the resource now complies with its reference model.

This remediation capability is extremely useful to enforce installation of security patches within your environment. Regardless of when users connect to your network, you can use Tivoli Configuration Manager to automatically check against your reference models to determine if they are up to date with their patches.

Using reference models, you can manage subscribers according to the role each plays within your organization. Tivoli Configuration Manager offers flexible models — multiple root reference models, multilayered inheritance from upper layers and multiple

subscriptions — so that you can enforce standards in a way that corresponds with your organizational structure and business requirements.

When requirements change or subscribers change roles, you simply update the reference models or the users' subscriptions to reflect the changes and publish the updated reference model to automatically generate new activity plans as required.

Integrated data collection enables correct target identification and powerful reporting

Information about your systems and users is crucial when you want to accurately identify the targets for distribution — and when you want to report on both distribution and your enterprise's inventory. Tivoli Configuration Manager helps you gather and maintain up-to-date inventory information in a distributed environment quickly, accurately and easily.

With Tivoli Configuration Manager, inventory is an integrated component. The inventory component helps you select targets for your activities automatically rather than manually. Because inventory is also totally integrated at the client agent level, Tivoli Configuration Manager allows you to incorporate scans into your activity

plans, so you can avoid unnecessary or incorrect distributions as well as unnecessary use of network bandwidth.

Use Tivoli Configuration Manager to obtain information about:

- *Applications – detect thousands of commercial applications. Additionally, you can configure Tivoli Configuration Manager to identify custom applications.*
- *Systems – provide detailed information about architecture, model, operating system and hardware.*
- *Users – leverage information from your enterprise directory and prompt end users for information that cannot be scanned.*

Tivoli Configuration Manager provides powerful facilities for using this data. The Crystal Reports that are provided enable system administrators and accounting personnel to:

- *Report on success rates and distribution outcomes for failures.*
- *Determine the installed software base.*
- *Confirm a software distribution.*
- *Supplement and replace physical inventory function.*
- *Assist in procurement planning.*
- *Check software requirements.*
- *Help control assets.*
- *Help pass audits and meet compliance requirements.*

Additionally, Tivoli Data Warehouse — which is included with Tivoli Configuration Manager — allows you to perform additional reporting tasks against this and other systems management data, without impacting the run-time environment.

Employ highly secure operations behind and beyond firewalls

Because software and patch distribution should support — not undercut — your security infrastructure, Tivoli Configuration Manager is designed to work in a highly secure fashion within your intranet and across the Internet:

- *Secure connections and use of encryption and package hashing provide a high level of integrity.*
- *Security for “pull” distribution – Leverage industry-leading WebSphere technology, IBM Tivoli Access Manager for e-business and your directory servers to provide a flexible, highly secure “pull” distribution capability to your end users, including those who use mobile technologies.*
- *Managing through firewalls without compromising your level of security is achieved with the Tivoli Firewall Security Toolbox, which is supplied with Tivoli Configuration Manager.*

Optimize bandwidth usage

As a configuration solution saves your administrators time, it should not shift the burden onto your network in a way that monopolizes bandwidth.

Consequently, Tivoli Configuration Manager includes a number of bandwidth-saving features:

- *WAN-smart capabilities – Move large amounts of data across complex networks in an efficient, asynchronous, multiplexed fashion to achieve reliable, high-performance transport – for both outbound and inbound data. You can define limits on the resource usage.*
- *Multicasting – Broadcasting software distributions to multiple users simultaneously to minimize the network bandwidth required for large-scale distributions. Data is transmitted on the network only once; the number of recipients affects distribution time only slightly.*

Manage your way

Tivoli Configuration Manager provides you with the flexibility of implementation to enable you to drive it to perform your processes, rather than being restricted by the product to conform to a single way of implementation. You define how you want to manage your environment, and Tivoli Configuration Manager provides you with the tools and automation to achieve it. Using Tivoli Configuration Manager can help you implement your Information Technology Infrastructure Library (ITIL)-based processes and build the foundation of your Configuration Management Database (CMDB) with the Tivoli Configuration Manager Inventory database.



Tivoli Configuration Manager, Version 4.2.2 server and managed node run on the following operating systems

- IBM AIX® 4.3.3, 5.1, 5.2 and 5.3
- Sun Solaris 7, 8 and 9
- HP-UX 11 and 11i
- Windows 2000 Server and Advanced Server with SP4
- Windows Server 2003 Standard
- Windows 2003 Enterprise
- Windows 2000 Data Center with SP3 or SP4
- RHEL 2.1 AS (IA32)
- RHEL 3.0 AS (IA32)
- SuSE Linux® Enterprise Server, Versions 7, 8 on IBM zSeries®
- SLES 8 / UL 1.0 for IBM S/390® and zSeries
- SLES 8 / UL 1.0 for IBM iSeries™ and pSeries®
- SLES 9 for IA32
- SLES 9 for S/390 and zSeries (08/04 GA)
- SLES 9 for iSeries and pSeries (08/04 GA)

Pervasive devices

- Palm OS 3x, 4x, 5.0
- Windows CE
- Windows CE PE 3.0
- Pocket PC
- Pocket PC 2002
- .NET, Version 4.0
- Nokia Communicator Symbian OS

For more information

To learn more about Tivoli Configuration Manager and integrated solutions from IBM, contact your IBM representative or IBM Business Partner, or visit ibm.com/tivoli

Tivoli software from IBM

An integral part of the comprehensive IBM on demand infrastructure solution, Tivoli technology management software helps traditional enterprises,

emerging on demand businesses and Internet businesses worldwide maximize their existing and future technology investments. Backed by world-class IBM services, support and research, Tivoli software provides a seamlessly integrated and flexible on demand business infrastructure management solution that uses robust security to connect employees, business partners and customers.

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