bmc

solution white paper

Patch Management

The set-it-and-forget-it strategy

Table of Contents

INTRODUCTION

Anyone in IT who is responsible for managing multiple machines and applications should have a solid patching strategy. Surprisingly, many organizations do not have a standardized approach and often rely on built-in patch mechanisms, such as automatic update. Unfortunately, relying on the automatic update feature can create more problems than those the patch fixes. What's more, these approaches don't always provide a standardized way to manage third-party software packages and their update programs. There is a lot to consider when building a patch management strategy that works best for your organization, your various systems, and your applications.

BMC Client Management supports both manual approval patching via patch groups and set-it-and-forget-it patch management. Both of these approaches reduce costly manual efforts by enabling IT to protect systems and data more quickly and efficiently. Only you can determine which patches to automatically deploy versus those that need to be lab tested before placing them into production. Both methods have advantages that we will cover in the following sections. You need to consider both service packs and individual operating system (OS) and application patches when developing your strategy and deciding when it makes sense to fully automate patching versus maintaining a hands-on process.

There are two approaches for patch deployment:

- Controlled: (testing and deployment)
- Set-it-and-forget-it: (trusted vendor; auto-deployed)

SERVICE PACKS

Service packs should set the foundation for your patching strategy. Rather than deploying them via the set-it-and-forget-it method, you should use patch groups in a controlled manner. This reduces the likelihood they will negatively impact your environment. Service packs consolidate all the security vulnerabilities and updates into one update package. Utilizing the service pack helps with the long and continuous update processes throughout—and between—ongoing security patch releases. Service packs tend to be large and cumbersome, so we recommend using a centralized delivery mechanism.

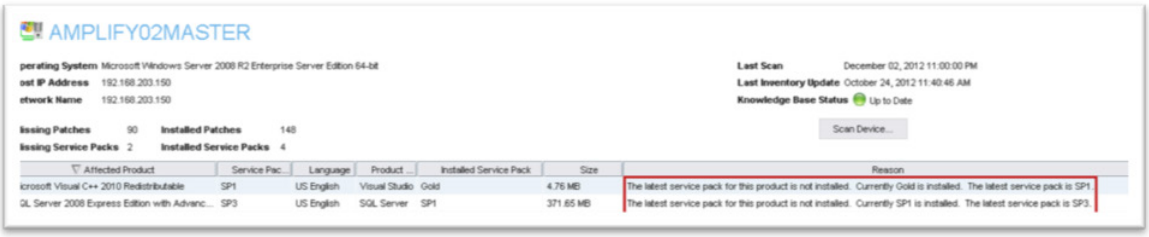


FIG 1: Quickly view which systems have the latest service packs.

BMC Client Management allows you to easily scan and identify which service packs are missing. Then, by simply right-clicking on the relevant device, you can apply a patch to the desired machine. You can also push out service packs to select machine groups in the environment—applying a scaled approach to your update process. Simply select a patch group, assign the service pack you would like to deploy to that patch group, and then assign that patch group to specific device groups.

PATCH GROUPS

With the first of these two options, you should have a process in place that includes new patch testing through patch groups and small test groups within your environment. We cannot stress the importance of this process enough, especially when dealing with business-critical machines.

In most environments, there are numerous user machines that only have basic software—nothing out of the ordinary. Because of their generalist nature, these machines typically require very little testing and operate smoothly with most patches. With BMC Client Management, you simply assign device groups to those patch groups that you previously designated as groups containing non-business critical devices that can be patched without issue.

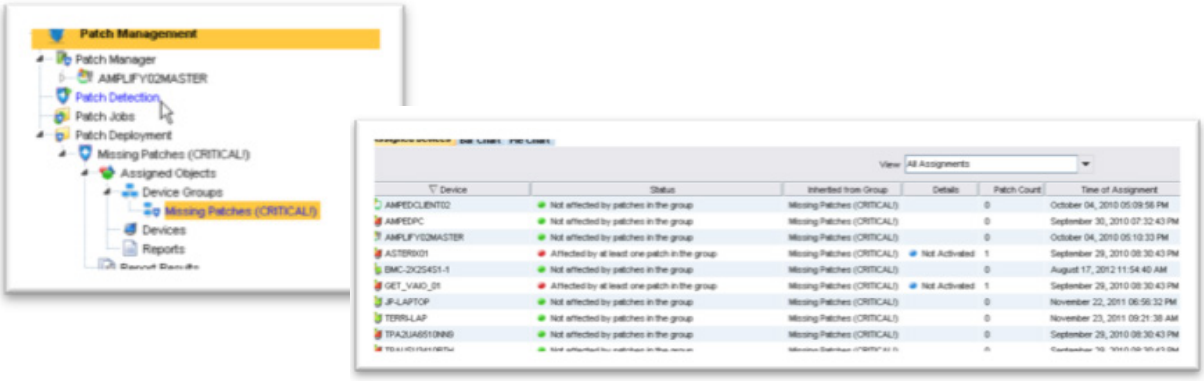


FIG 2: Consolidated view of missing patches in the environment

There are also certain machines grouped within your environment that you may often leave out of the general patching pool. These machines typically require additional patch testing before deployment due to the nature of the applications that reside on them. Similarly, if a system is working, it may be considered ineligible for patching. That is, if it is not connected widely (or at all) to an exposed network (external or broad internal). For example, this includes legacy applications on systems that are functioning properly. You should always consider your machines' accessibility and connectivity as part of this patching approach; securing critical applications and associated data should be a priority.

You can use a centrally managed patching system to separate which patches go to which machines and when, minimizing disruption to business and user productivity.

Using BMC Client Management, you can create various machine groups from queries based on any criteria you want. For example, you may need to only patch devices with a specific type of software that is installed on the machine. First, create a query of devices with the software you are targeting.

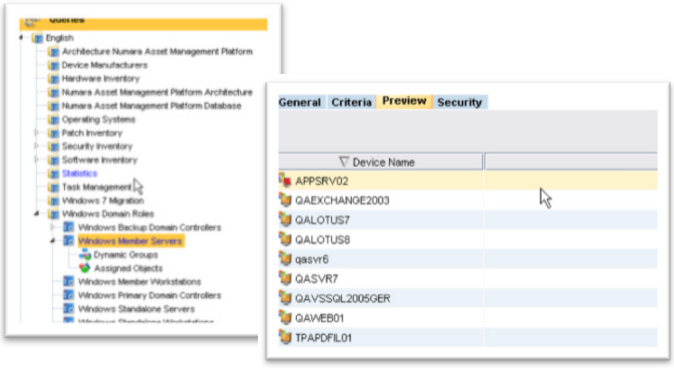


FIG 3: Quickly create a query by device type or installed software to group machines.

Next, create the test patch group you want to use. From there, you can specify the patches you want to deploy, assign device groups, and activate the patch group that will deploy the right patches to the right machines in this group.

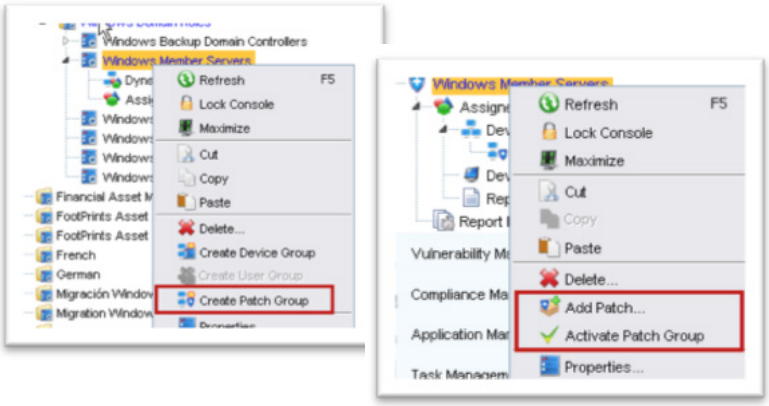


FIG 4: Right-click to create a patch group, add a patch to a patch group, or activate a patch group to deploy patches to the selected group of machines.

SET-IT-AND-FORGET-IT PATCHING

The second option for patching focuses on the automatic update patching process. Third-party software is hard to reach and control, especially for every update. Therefore, you will need to download and install the patch on each machine. You may have to reboot the machines too. Not having a centrally managed plan in place for third-party patching can create very time-consuming processes. To maintain productivity, you will want to back up systems and make sure changes can be rolled back if needed.

To set up automated patching, we recommend using the Patch Distribution Wizard within BMC Client Management. From here, you can easily and quickly specify which patch types and criticalities to deploy.

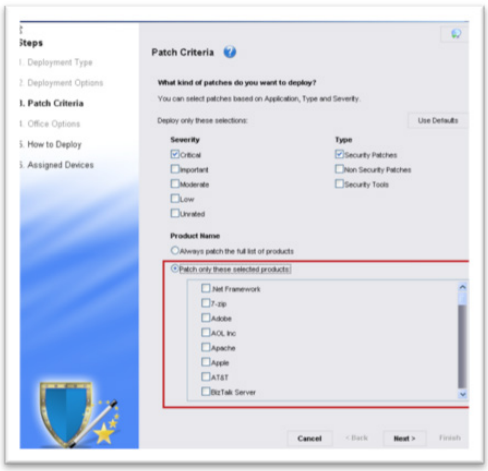
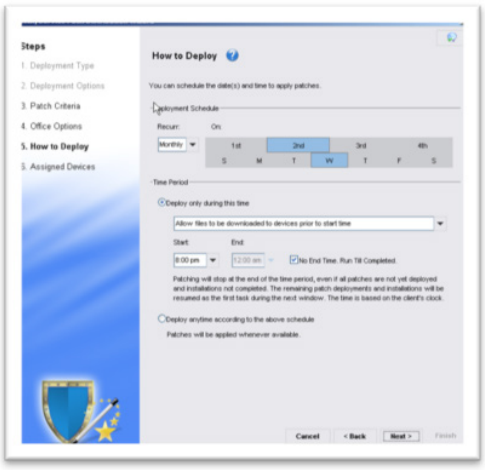


FIG 5: Use the Patch Distribution Wizard to select which patches to download automatically based on severity, type, and product name.

CREATING A SCHEDULE

Patching is not an optional activity. When the rest of the business knows you patch on the third Thursday of the month, for example, no one will schedule conflicting tasks. That's why you will want to make sure your own server patch management schedule includes predictable, published, and inviolate maintenance windows. Below is an example of how simple it is to set a patch schedule with BMC Client Management.

Within BMC Client Management, you can specify configurable patching windows. For example, you can deploy patches every second Wednesday of the month at 8:00 p.m.



With automated patch schedules, you can inform your key business and IT stakeholders when patches will be deployed and when they can expect changes. You can also build these schedules around your internal processes, so the patch deployment process does not conflict with other business activities.

BENEFITS OF AUTOMATION

Using the BMC Client Management Patch Distribution Wizard, you can ensure that all patches from specific vendors are installed as soon as they are available. Your configured patch window will open, on specific pre-approved devices, without any user interaction. Agents automatically scan, update, and download the latest patches from an extensive, constantly updated knowledge base. This removes the need to conduct manual device scanning or to review what software versions are currently deployed versus the latest available.

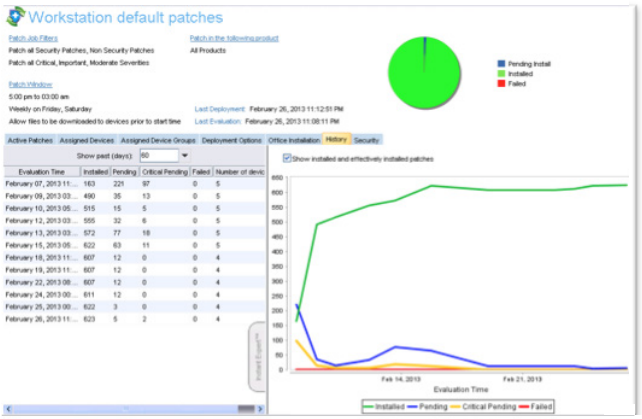


FIG 7: The patch group history shows patch installation trends over time.

VERIFICATION

Now that you have automated your patch deployment process and it is running like clockwork, the only thing left to do is to verify patch installation over time. You can schedule some built-in patch reports to automatically run and email to managers on an ongoing or scheduled basis, specific to your patch deployments.

FIG 8: Get an on-demand snapshot of your patch status or share patch status reports as needed or on a scheduled basis.

BMC Client Management even gives you an easy reporting mechanism, so you can see which machines have been patched properly and which may still need attention (see Figure 8).

Your patching strategy depends on proper implementation. From start to finish, deploying the right mix of patch groups with set-it-and-forget-it patching is simple and quick with the Service Pack Distribution Wizard in BMC Client Management Patch. Have you successfully patched today?

To learn more about BMC Client Management, please visit **www.bmc.com/it-solutions/client-management.html**

BMC delivers software solutions that help IT transform digital enterprises for the ultimate competitive business advantage. We have worked with thousands of leading companies to create and deliver powerful IT management services. From mainframe to cloud to mobile, we pair high-speed digital innovation with robust IT industrialization—allowing our customers to provide amazing user experiences with optimized IT performance, cost, compliance, and productivity. We believe that technology is the heart of every business, and that IT drives business to the digital age.

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