

RED HAT

The Cat in the Red Hat



Red Hat grew its Linux business out of its home Linux distro, 'Red Hat Linux'. However, it was the first company to really try to put a corporate edge on Linux, and this came to its conclusion a few months ago when it split off its home distro into the Fedora community project. As its Enterprise Linux WS, ES, and AS continue to win acclaim from users, most don't realise that Red Hat actually make a suite of applications that build upon the structure and benefits provided by the base OS.

These four apps, cleverly branded 'Red Hat Applications', are *Red Hat Cluster Suite*, *Red Hat Content Management System*, *Red Hat Developer Suite*, and *Red Hat Portal Server*, are each designed to fill a complex niche in computing environments. Following the Red Hat Enterprise Linux formula, each of the applications are based on successful Open Source projects that Red Hat has repackaged, rebranded, enhanced, and released with enterprise-level support. Thanks to the smooth integration with RHEL, each of program is easily used as a plug-in module that give you immediate functionality with little installation and configuration effort.

Although you don't need to purchase more than one at a time, many users have found that they interlink so well that it simply makes sense to install several. Here's a look at

Red Hat has been focusing on the enterprise for some years, but most people don't realise quite how wide its offering is. PAUL HUDSON reveals all...

Red Hat Cluster Suite allows you to set up failover systems across a LAN or even a WAN with just a few clicks, and all with complete transparency for end users.

what each application does, how it's being used, and what it can do for your business.

Cluster Suite

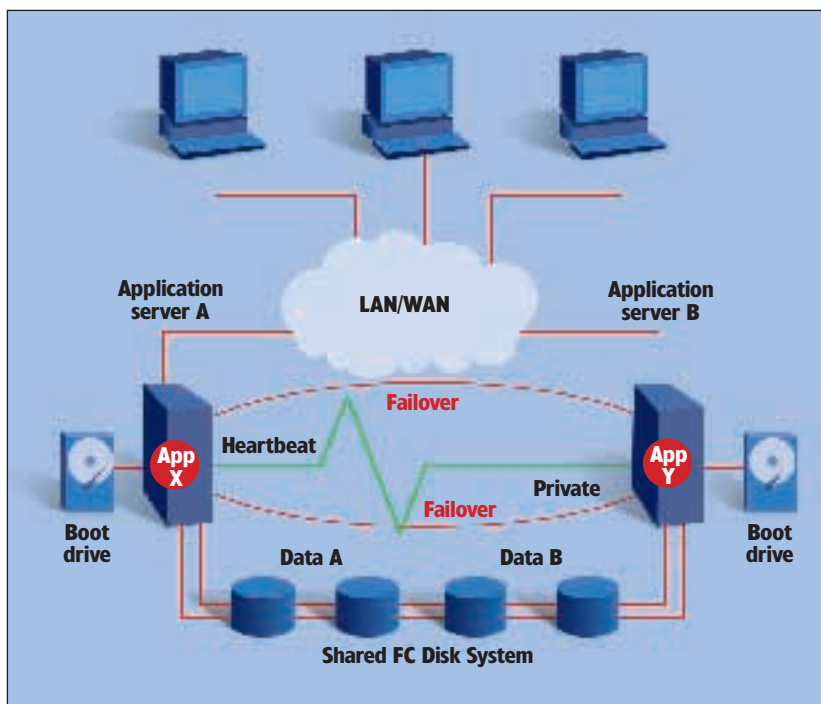
The need for high availability (HA) and load balancing has always been high, and this is set to grow as fewer servers are used in specialised roles each year. As seen in the OpenMinds feature in *LXP49*, it's increasingly common to see a file server shadowing a web server, and that same web server shadowing the file server as a means to provide backup for two servers. However, unless you bring in the experts, configuring high availability remains a black art in the extreme, and it this is the area the first part of *Cluster Suite* aims to beat.

While some HA packages need specific modules for each package you want to cluster, *Cluster Suite* ships as one package capable of working with the majority of commercial applications, file and print serving, databases, and of course most Open Source applications too. Many of these apps come preconfigured in the software – you can simply select the layout you want and have *Cluster Suite* do all the hard work. More complex layouts can be created by basing new designs on existing templates, or for particularly complex situations you can call in Red Hat Professional Services, who can create custom *Cluster Suite* deployments as necessary.

As well as providing clustering technology, *Cluster Suite* also comes with load balancing so that you can transparently distribute network load over a server farm to increase your throughput. This goes arm-in-arm with high-availability clustering, giving people an all-in-one package with *Cluster Suite* that can cluster and load-balance up to eight machines with the minimum of configuration.

RH Content Management System

CMS software saw massive growth in 2003 as companies evaluated new ways to lower their costs without lowering the quality of their website. Red Hat's approach, allowing its *Red Hat Content Management System* to be powerful and flexible enough to integrate directly into RHEL whilst still trying to keep the price low, is likely to win them many customers. Like *Cluster Suite*, *RHCMS* works as a module into the larger RHEL, which means you can re-use your existing skillset for the most part. For CMS-specific editing, the software comes with a web-based interface that can be accessed from any authorised device. Authorisation itself is handled by the system administrator, who can assign tasks and permission levels to accounts on the system. The advantage of having the whole system on the web is that it can be accessed from



any web-capable device, whether that be a desktop PC, a laptop, or even a GPRS-capable mobile phone.

Despite being available at low cost, *RHCMS* comes with advanced functionality usually only seen in more expensive products. Control over site content can be broken up into sections, each of which can be configured independently, have their content written and scheduled separately, and administered by a local sys admin if necessary. As Red Hat has managed to capture such a large amount of functionality and ease of use in its CMS software, it's not surprising that it seems to be the most popular of the four applications. Of course, it's a big help that content management continues to be in great demand from businesses of all sizes, whereas the other three applications featured here are generally more high-end in nature.

Portal Server

The next application of the four is *Red Hat Portal Server*, which allows you to quickly and easily piece together a groupware homepage for your intranet or team website. Each portal, and there can be several, is made up of a variety of 'portlet' applications – individual modules that each perform a given task independent of other portlets – and all of the portlets come together in one page.

A large variety of portlets come installed by default with *Portal Server*, of which the most useful are probably the Application Directory, which provides direct links to specially selected applications; the Document Manager, which lists all documents that have recently been used by a member of the group; and the RSS feed reader, which helps you syndicate news and updates from other sources. Although it's the administrator who decides what portlets should be available globally, individual users can pick and choose what portlets they want to see and where they should be positioned. They can also choose their theme, their language, and also, if they have permissions, who can do what within the system.

The biggest advantage of *Portal Server* is that it can draw from a number of disparate sources easily, then communicate the combination back out over the web to any compatible devices. Although the other Applications here are useful, this one is the most *obviously* useful – you can deploy it and start reaping the rewards immediately.

All in one

Although these four applications are produced and sold separately – and all are independent enough that they just require Red Hat Enterprise Linux in order to run – there are certain combinations that work together particularly well.

DEVELOPER SUITE

BASED ON THE OPEN SOURCE Eclipse IDE, Red Hat Developer Suite is the one client-side tool amongst the Applications set. Designed for users of Red Hat Enterprise Linux WS who want to add a comprehensive development environment to their desktop, the Developer Suite is fairly close to the stock Eclipse release. This is quite unlike the other three apps, where a lot of work has gone into branding and enhancing the product to make it better fit into the Red Hat Enterprise line. As a result, it's no surprise that it's available as a complimentary download for all Red Hat Enterprise customers: but this is marked as an introductory offer so get in quick if you want it. Alternatively, just download and use Eclipse – you'll probably not notice the difference.

For example, the portal server and content management system combined allows you to give your website team a virtual intranet where they can try things out and produce the live edition, then have them roll it out to *RHCMS* when ready. Furthermore, *RHCMS* and *Cluster Server* work together very well as you can produce your site using *RHCMS*, then roll it out onto the live servers and have *Cluster Server* automatically mirror the updates across your backups. Dunkin' Donuts, one of the largest confectionery stores in the US, rolled out a solution based on Red Hat applications. Oscar Herrera, the senior architect, was clearly impressed with the system, as he said "Red Hat offered a low-cost, solution which could be implemented rapidly, and having the source code, provided flexibility in how we integrate the *RHCMS* and *Portal Server* solutions with other Dunkin' Donuts applications. After looking at other potential software integration providers, we found that Red Hat also have the technical skills and experience to tackle the integration problems."

Each of these applications share the same easy installation system, thanks to the fact that they are all made for Red Hat Enterprise Linux, however that's largely where the similarity ends. With little cohesion between them other than what you are able to put together yourself, it becomes clear that this application line doesn't seem to be planned. Some parts, such as the *Cluster Suite*, used to be an integral part of Red Hat Enterprise Linux 2.1, but was then stripped out for v3 and sold separately. Other parts, such as several of the portlets in the portal server, have been done before, and usually better – the message forum portlet, for example, is about as basic as you can get.

Of course, this all needs to be regarded in light of the market Red Hat is aiming at. Its Enterprise Linux line, for example, strongly focuses on product maturity as opposed to the highest version number, and these applications follow suit. That is, although some features are missing and the interface sometimes feels like it was designed when HTML 4 was still a novelty, you're not likely to find any bugs in the systems because they have been so extensively tested by Red Hat and beta testers. Let's not forget this is *Enterprise Linux* – no one, and we mean *no one* who runs the IT department of a blue-chip company would want to deploy a clustering server that wasn't vigorously tested and, more importantly, backed up by a Linux giant like Red Hat.

From this perspective, the Applications lineup makes Enterprise Linux into more than just a basic OS. With these packages in combination, you can scale out massively with the load balancing, keep your network failsafe with clustering, get your staff pro-actively contributing to your site

with *RHCMS*, and also help your teams work together with portal server. What's more, you can do all this using software from one provider, which centralises your support, keeps your costs low, and ensures full software compatibility – music to the ears of CTOs and VPs the world over. ■

"With this application family, Red Hat is taking a leadership role and is committed to providing reliable applications as a key part of our enterprise platform."

PAUL CORMIER, VICE-PRESIDENT OF ENGINEERING, RED HAT

