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cPanel Conference '10

Best Practices

Making money with Enkompass

John L Koston
Manager of Windows Products
cPanel Inc.

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Enkompass Talks

Tuesday

09:00

**Best Practices (Making money with Enkompass) –
*John L Koston***

10:00

**Windows Server 2008 PCI Compliance - *Jennifer
Doubrava***

2:10 PM

Managing Multi-tiered Resellers - *Sruthi Sanigarapu*

Wednesday

10:00

Troubleshooting Enkompass - *Eric Ellis*

3:50 PM

**Intermediate Automation Using the Enkompass WCF
API – *Tom Green***

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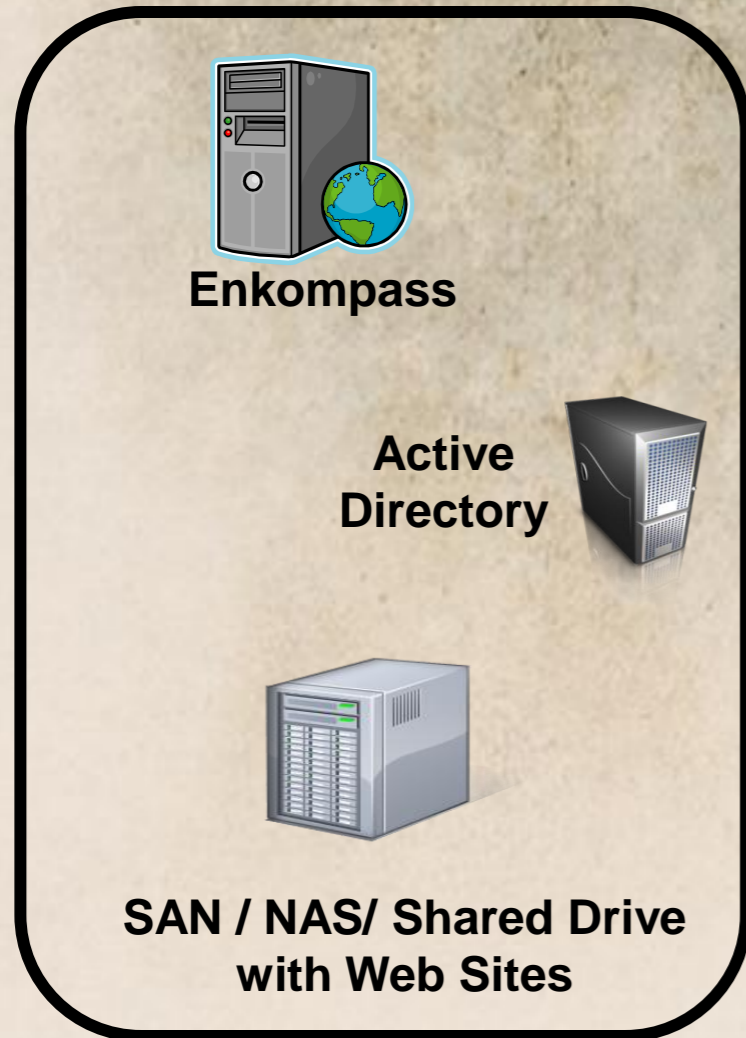
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Agenda

- Enkompass Architecture
- Features that Lower Operating Costs
- Differentiate your Offerings
- Questions

The Enkompass Domain

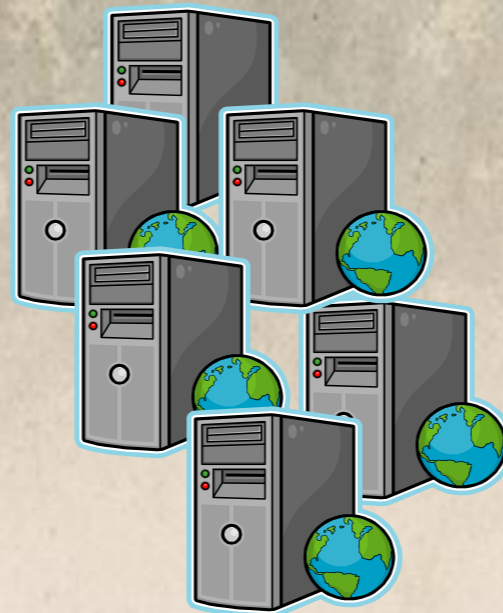
Enkompass Core



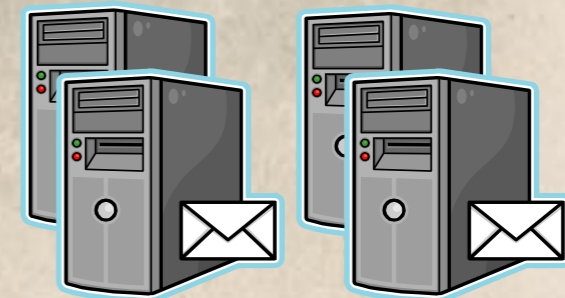
One or separate servers

Hosting Services

Web



Mail



SmarterMail

MailEnable

Database



MySQL



MS SQL
2008



MS SQL
2005



MS SQL
Express

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Lower Operating Costs

- Administrator / Reseller Interface
- Multi – Level Resellers
- Web Site Owner Interface
- Active Directory
- Web Sites on a Shared Disk
- Specialized Servers
- Service Monitoring

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Lower Operating Costs

Administrator Interface

- Quick and complete management of accounts
- Backups of the accounts
- Certificate Management
- Management of Resources
 - Servers, IP Addresses, Plans, Roles and Reseller Features
- Service Monitoring
- Bandwidth Reporting and Limiting
- Impersonation of Web Site Owners

Lower Operating Costs

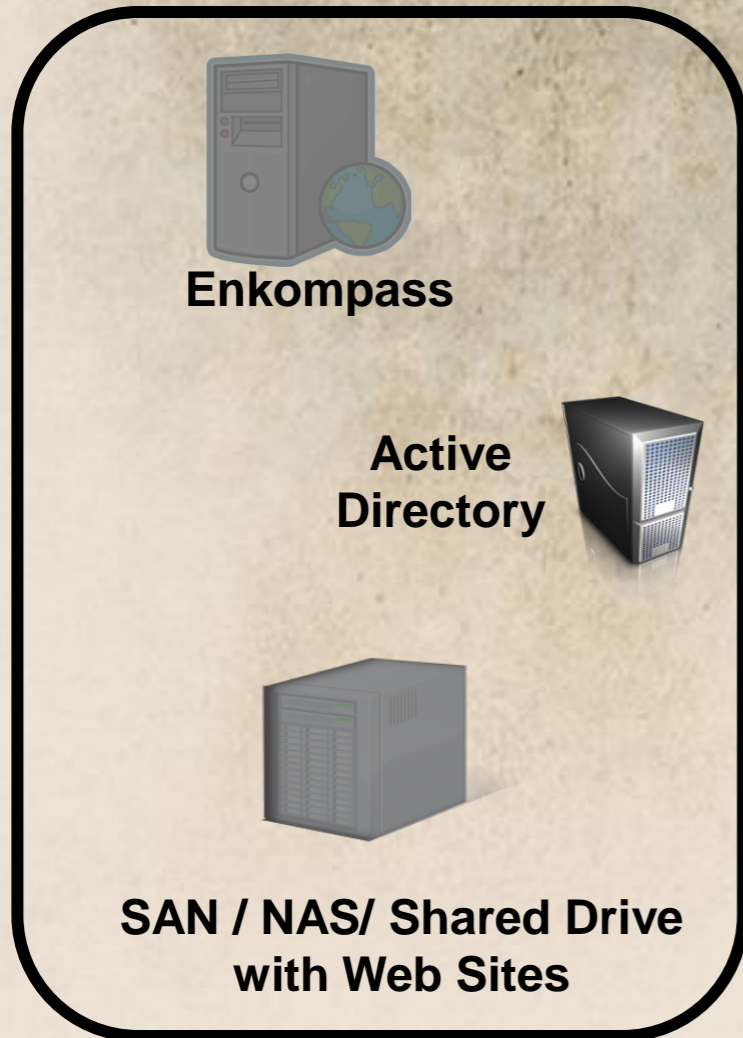
Web Site Owner Interface

Account Holders can safely self manage their web sites:

- Backup their account
- Create and maintain their mail accounts and lists
- Manage their databases
- Install a certificate
- Manage their domains – Add-on, Parked and Sub Domains
- Analyze web logs
- Use File Manager to maintain their web sites
- Control common web configurations – MIME Types, Error pages, Directory Browsing
- Restart their web sites

Active Directory Domain

Enkompass Core



One or separate servers

Hosting Services

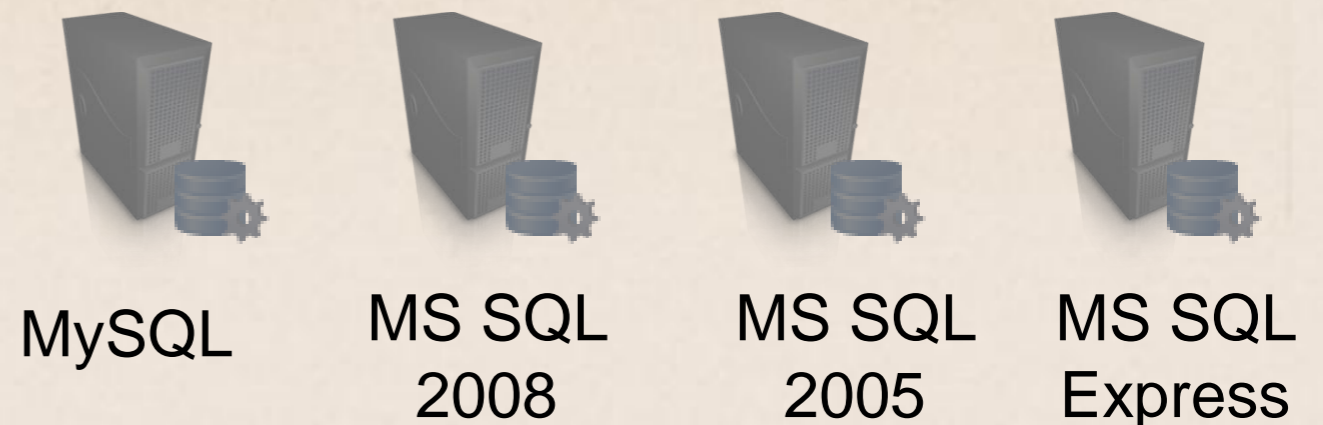
Web



Mail



Database



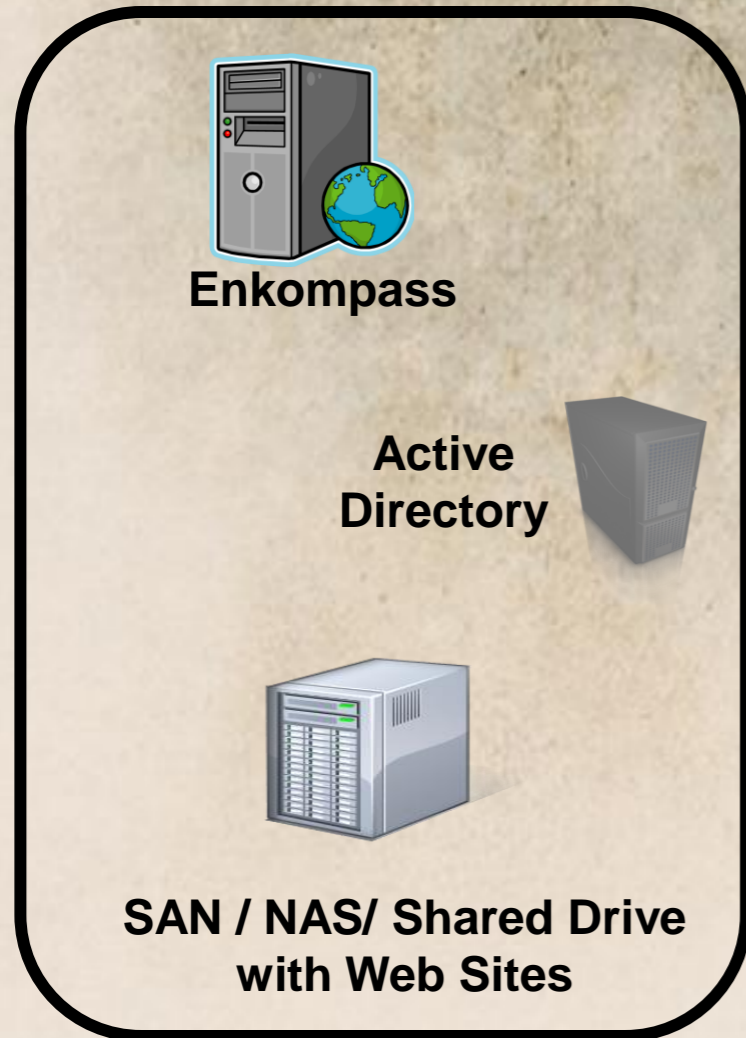
Active Directory Domain

Why use Active Directory?

- Account information is stored securely in Active Directory.
- Domain wide authentication
 - Used to secure the servers.
 - Enkompass can install services on the remote servers.
 - IIS7 Web Servers can use a common store for the web site files.
- Not included with Windows Server 2008 Web Edition.
- Active Directory can be installed on the Enkompass Server. But is not recommended for PCI Compliance.

Web Sites on a Shared Disk

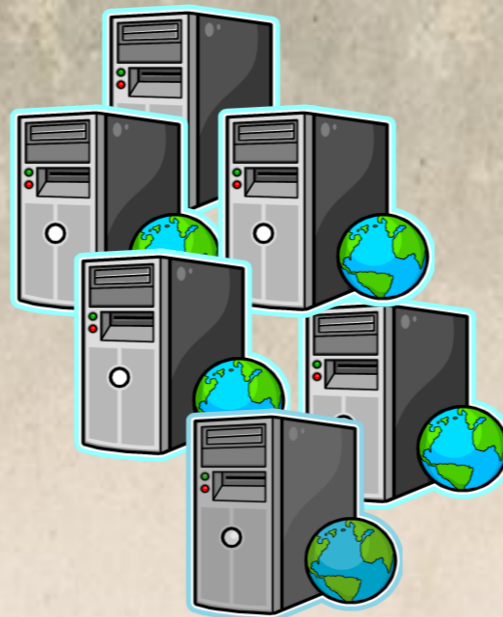
Enkompass Core



One or separate servers

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Web Sites on Shared Disk

Web Site Files are on a Volume (Disk) Share

- Web sites can be served from any / all web servers
- Files are not scattered among the web servers
- Easy to back up the web sites
- Storage options:
 - SAN - Highest speed and safest storage. Highest initial cost but may be lowest TCO.
 - NAS – Moderate cost. Limited by network speed. Few support NTFS Disk Quotas
 - Windows File Share – Low cost. Supports NTFS Disk Quotas. We recommend RAID 5 or 10.

Specialized Servers

- Separating the services (Mail, DB, IIS) provides for more reliability and higher performance.
- Reduces hardware cost
- Reduces memory contention
- Reduces software conflicts
- Allows for optimizing a server for a particular service such as Microsoft SQL Server
- Increases security
- Lowers licensing cost

Specialized Servers

Reduce Hardware Costs

- Web Servers can run on inexpensive 1 U boxes
 - Boot disk or network boot
 - 4GB Memory
 - IIS7 is multi-threaded 4 – 8 Cores preferred
- Mail and Database Servers should be run on high performance servers
 - RAID disk subsystems
 - 4 - 64 GB Memory
- Memory Limitations
 - Number of slots
 - Cost 4GB \$150 8GB \$500 16GB \$1400

Specialized Servers

The Enkompass Server

- All users log into the Enkompass Server keeping it's web traffic off the web servers.
- Enkompass serves from a private web server. Web Sites can still serve from the main IIS.
- Enkompass is installed once. Not on all the web servers.
- Runs on the inexpensive Windows Server 2008 Web Edition
- If the Enkompass Server is being updated or is overloaded the other servers will still function.

Specialized Servers

Web Servers

- Use as many as you need for your business. Easily add more as your business increases. Don't pay for servers until you need them.
- Use the inexpensive Windows Server 2008 Web Edition
 - IIS7 on Windows Server 2008
 - IIS7.5 on Windows Server 2008 R2
- Configuration data is periodically written to applicationhost.config on each web server that a web site is assigned to.
- Servers can be dedicated to one web site, one reseller or shared.

Specialized Servers

Mail Servers

- Use as many as you need for your business. Easily add more as your business increases. Don't pay for servers until you need them.
- Smarter Mail and MailEnable are supported
- Windows Server 2008 Web Edition can only be used for POP. You need Standard Edition for IMAP or MAPI.
- Servers can be dedicated to one web site, one reseller or shared.

Specialized Servers

Database Servers

- Use as many as you need for your business. Easily add more as your business increases. Don't pay for servers until you need them.
- MySQL for Windows, Microsoft SQL Server 2008, 2008 Web Edition, SQL Express and SQL Server 2005 are supported.
- Multiple instances of MySQL and SQL Server 2008 can be run on a server for increased security.
- Microsoft SQL Server uses resources heavily and should have its own server.
- Servers can be dedicated to one web site, one reseller or shared.

Specialized Servers

Service Monitoring

- Enkompass includes a separate service to monitor the hosting services used by Enkompass on all servers in the domain. The service will email you when problems occur with your servers.
- This is not just a ping of the server. Each service is required to respond with the result of some work.
- Monitored Services

Enkompass – Enkompass Service, MySQL connector,
Enkompass Web Server

Mail Servers – SmarterMail and MailEnable

Web Servers – HTTP and FTP

Database Servers – MySQL and Microsoft SQL Server

Licensing

- Customers request Windows Hosting to get ASP.Net, Microsoft SQL Server and better isolation.
- Quality software is seldom free in the Microsoft Environment.
- Most Hosting Companies operate their servers under the Microsoft SPLA and pay a monthly fee.
- Enkompass was designed to minimize the cost of licenses by

Sharing expensive services

Using the most inexpensive editions of Microsoft Windows Server 2008

Licensing

Traditional Linux Standalone Model where everything is installed on all servers. First year costs for 10 Servers.

- Inexpensive Offering

Windows Standard (required for IMAP)	\$2160
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MySQL Community Server or SQL Express	\$0
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Mail Enable Pro Unlimited (no support)	<u>\$3500</u>
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Total	\$5660
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- Business offering:

Windows Standard	\$2160
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Microsoft SQL Server Web	\$1800
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SmarterMail Pro Unlimited (no support)	<u>\$12,000</u>
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Total	\$15,960
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Licensing

Enkompass Model First year costs for 10 Servers.

- Inexpensive Offering

2 Windows Standard (IMAP, Active Directory)	\$360
8 Windows Web Edition	\$960
2 MySQL Community Server	\$0
2 Mail Enable Pro Unlimited (no support)	<u>\$700</u>
Total	\$2,020

- Business offering:

2 Windows Standard (IMAP, Active Directory)	\$360
8 Windows Web Edition	\$960
2 Microsoft SQL Server Web	\$300
2 SmarterMail Pro Unlimited (no support)	<u>\$2,400</u>
Total	\$4,020

Licensing

License Cost Summary First year costs for 10 Servers

- Inexpensive Offering

Standalone Model	\$5660
Enkompass Model	\$2,020
Savings	\$3,640

- Business offering

Standalone Model	\$15,960
Enkompass Model	\$4,020
Savings	\$11,940

Licensing

Direct Pricing for Enkompass

Available August 2010

Number of accounts	License term (Years)	Cost	Price per account (Annual/Monthly)
500 accounts	Partial year (see details)	Varies by option (see details)	NA
500 accounts	1	\$620	\$1.240/\$0.103
500 accounts	2	\$1130	\$1.13/\$0.094
500 accounts	3	\$1560	\$1.04/\$0.086

Discounts

When you purchase your	You get
2nd license	10% off
3rd+ license	20% off
11th+ license	25% off

- Both cPanel/WHM and Enkompass licenses count towards your discount.
- For the purpose of calculating discounts, every 500 accounts is equivalent to 1 cPanel license.

Multilevel Resellers

- Each Reseller has their own set of IP Addresses, Mail Servers, Database Servers, roles, plans, WSO Themes and a contact address
- They can pass these resources down to the resellers they own or give them to Web Site Owners.
- Servers can be shared or dedicated to a single owner or reseller
- The Web Site Owners only know about their immediate Reseller.
- Admin owns all resources and resellers.
- We have a talk dedicated to explaining the Reseller structure in greater detail. Please see “Managing Multi-Tiered Resellers” at 2:10 today.

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Differentiate your Offerings

Encompass allows you to create accounts with different limits and features. You can assign and charge for:

- Shared or Dedicated IP
- Dedicated Server
- Multiple Web Servers
- Number of Domains, Add On, Sub and Parked
- Disk Space
- Monthly Bandwidth
- Number of FTP users
- Certificates
- PHP
- Overselling
- E-Mail
 - Number of Users and Lists
 - SmarterMail or MailEnable
- Databases
 - Number of databases
 - MySQL and / or MS SQL Server
- Backups
 - User backups
 - System Backup Frequency

Differentiate your Offerings

Features and limits can be stored in Plans and Roles.

- Plans
 - Plans are by design, very similar to the plans in WHM for Linux.
 - Simply assigning a plan sets the roles and limits quickly
 - Accounts are either in a plan or they are not in a plan.
- Roles
 - WSO Roles determine the features the account holder sees in WSO.
 - Reseller Roles determine the features the reseller has in the Reseller Interface
- This is explained in detail in the talk called “Managing Multi-Tiered Resellers” at 2:10 today.

Differentiate your Offerings

Bandwidth Reporting and Limiting is a unique service included in Enkompass

- A custom module added to IIS7 collects bandwidth data on each web server.
- The bandwidth data is periodically consolidated onto the Enkompass Server.
- Enkompass can suspend accounts exceeding their bandwidth limit
 - An email is sent to the reseller when an account is suspended.
 - The account holder cannot log into WSO
- There is a web page in the Reseller Interface to display and manage accounts that are suspended for exceeding their bandwidth limit.

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