Veritas NetBackup™ 8.2 Licensing Guide

June 2019

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This guide supersedes
previous licensing guides

Contents

1. Introduction

The Veritas NetBackup[TM] 8.2 Licensing Guide (Licensing Guide) is a reference document designed for use by Veritas partners and customers. The Licensing Guide describes licensing concepts and options available for NetBackup 8.2 and provides details that can help guide the customer to purchase the appropriate NetBackup license for the customer's specific environment. For any question or comments about this guide please contact your Veritas representative.

1.1. EULA & PUR

Please note that this Licensing Guide is to be used for reference purposes only. For details on the specific license rights provided under a particular NetBackup product offering, refer to the applicable NetBackup End User License Agreement (EULA) and NetBackup Product Usage Rights (PUR), which are available on the company's website on the [Product License Agreement](#) page, under the Current Agreements tab, and under the NetBackup section.

2. Licensing and Packaging Overview

Veritas offers customers two licensing options to purchase NetBackup software: Platform Base (or Capacity) model, and the Traditional (or Server) model. The below graphic provides an overview of the NEVC and Platform Base options and the features included in each package:

NBU Compl. Ed & NBU Compl. Ed with Flexible Licensing	NBU Big Data Workload Edition	NBU NDMP Edition	NBU Limited Edition	NEVC	NBU Traditional
Perpetual, Subscription	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual
Per FETB || Per FETB Plus	Per FETB	Per FETB	Per FETB	Per CPU	Various meters
Best in Class Unified **Enterprise** Data Protection across all environments	Best in Class Unified **Enterprise** Data Protection for Big Data Workloads across all environments	Protection of file data on NAS filers using NDMP policies or NDMP data movers	Unified Enterprise Data Protection aimed at mid market customers with **Linux/Win/x86 only** environments	Enterprise Data Protection for **Virtual + Multi Cloud** environments.	Build your own solution

- Standard Client   • Enterprise Client   • Enterprise Server   • Data Protection Optimization Option

- Server   • NDMP Option   • Vault Option   • OpsCenter Analytics
- Library Based Tape Drive   • Shared Storage Option   • Replication Director

- Application and Database License Pack

Add On Purchase: Appl. & Database Add On

- Application and Database License Pack

- SAP Agent
- Self Service

					Build your own solution
CANNOT combine with Limited Edition	Restricted to Hbase & Hadoop **Only**	**NDMP File Data Only** Cannot combine with Limited Edition	**250TB Limit; No Unix** **CANNOT** combine with Complete Ed., Big Data Workload or NDMP Edition	**Virtual Environment Only** Can combine with Complete Ed., Big Data, NDMP	

NBU Traditional features:
- Std & Enterprise Client
- Enterprise Server
- Data Protection Optimization Option
- NDMP Option
- Library Based Tape Drive
- Replication Director
- Shared Storage Option
- Vault Option
- OpsCenter Analytics
- Application and Database License Pack
- Self Service
- Enterprise Vault Agent
- Cloud Catalyst

[Skip to Complete Ed](#)   [Skip to Big Data Workload Ed](#)   [Skip to NDMP Ed](#)   [Skip to Limited Ed](#)   [Skip to NEVC](#)

2.1. Licensing Models

A perpetual license provides the customer a right to use the specific version of the software in perpetuity. Customers must separately purchase and maintain active maintenance/support to receive software upgrades and access to technical support.

Subscription or term-based license is an up-front charge for the right to use the product for one, two or three years; maintenance/support is included in the price. Customers who subscribe will not own the product, but they will have all the rights of ownership as long as they are subscribers.

3. Licensing Offerings

3.1. NetBackup Offerings and Feature/ Functionality Inclusions

NetBackup Platform Base licensing is a capacity-based model using the amount of source data protected per-terabyte as the sole or primary calculation meter (Platform Base). This model is commonly referred to as capacity licensing or Front-End Terabyte (FETB) licensing. The Platform Base model enables customers to license NetBackup based on how much source data is protected rather than the number of NetBackup clients, agents, servers, and options deployed as with Traditional licensing.

The Platform Base licensing model supports customers with multiple locations within the same domain, and customers with multiple domains as long as the customer has purchased a NetBackup license equal to or more than the total number of = FETB to be protected. Customers with multiple domains also have the option of using different licensing models in each respective domain, but customers are not allowed to utilize both the Platform Base licensing model and the Traditional licensing model within the same domain.

The Platform Base licensing model has four editions: Complete, Big Data Workload, NDMP, and Limited. The Complete, Big Data Workloads and NDMP Editions can be used together in the same domain. However, neither the Complete Edition, Big Data Workloads nor the NDMP Edition can be used in the same domain as the Limited Edition. The Platform Base licensing model includes most but not all NetBackup features and products.

3.2. NetBackup Platform Base Editions
3.2.1. Platform Base – Complete Edition
The NetBackup Platform Base - Complete Edition (Base – Complete Ed.) is only available for Front End Terabytes that are protected. If the customer has a large amount of data that will be protected using NDMP, the Platform Base – NDMP Edition may be the preferred edition.

To compare all editions, go to Licensing Overview.

3.2.2. Platform Base – Complete Edition with Flexible Licensing

The 'NetBackup Platform Base - Complete Edition with Flexible Licensing' (Base - Complete Ed. w/ Flexible Licensing) offering is available for Front End Terabytes that are protected. In order to utilize the multipliers available in Base - Complete Ed. w/ Flexible Licensing, customers must meet the following conditions:

- Customers must be running NetBackup version 8.1.2 or later on the master server(s) where the multiplier(s) are intended to be applied.
- Customers must enable telemetry via the Smart Meter functionality included in the NetBackup software or implement an alternate, Veritas-approved process to provide equivalent data to Veritas.
- Both conditions must be met within ninety (90) days of customer's initial purchase of NetBackup Complete Edition with Flexible Licensing.

The table below details the multiplier to be applied per workload. Applying the multiplier allows a customer to use 1 FETB Plus unit to protect data for the given workload in accordance with ratio defined in the table.

Workload	Ratio
Physical	• One (1) FETB Plus: One (1) FETB of data protected
Virtual Workload	• One (1) FETB Plus: One and a half (1.5) FETB of data protected

The multiplier is only applied to Base - Complete Edition with Flexible Licensing beginning with NetBackup version 8.1.2. Refer to the Product Usage Rights and the table Workloads Defined (section 1.13) to understand which policies apply to which workloads.

A customer's entitlements will not change relative to the quantity of licenses they have purchased. Customers are not required to designate the type of workload they are buying a license for. A license can be used for any workload and can be moved between workloads. When logging into VEMS a customer will see the actual units purchased. As of NetBackup version 8.1.2 the only place a customer will see the application of this multiplier is in Smart Meter.

A customer may combine both **Base - Complete Edition** and **Base - Complete Ed. w/ Flexible Licensing** licenses in the same domain. To understand how a customer's current NBU Complete Edition entitlements can coexist with the new NBU Complete Edition with Flexible Licensing entitlements consider the following scenarios.

Example 1: Customer has Base - Complete Ed. licenses (20 FETB) and needs an additional 5 licenses (5 FETB). Customer is currently on NetBackup version 7.7 and remains on 7.7 after the new purchase. Customer buys 5 licenses of Base - Complete Ed. w/ Flexible Licensing.

Customer entitlements before purchasing NBU CE w/ Flexible Licensing licenses?			
License Descriptions	Number of licenses	Physical Included?	Virtual Included?
NBU CE	20	Yes	No

5 new licenses NBU CE w/ Flexible Licensing →

Customer entitlements before purchasing NBU CE w/ Flexible Licensing licenses?			
License Descriptions	Number of licenses	Physical workload multiplier applied	Virtual workload multiplier applied
NBU CE	20	1	1
NBU CE w/ Flexible Licensing	5	1	1

Example 2: Customer has Base - Complete Ed. licenses (20 FETB) and needs an additional 5 licenses (5 FETB). Customer is currently on NetBackup version 8.1 and upgrades to 8.1.2 after the purchase of the new licenses. Customer buys 5 licenses of Base - Complete Ed. w/ Flexible Licensing.

Customer entitlements before purchasing NBU CE w/ Flexible Licensing licenses?			
License Descriptions	Number of licenses	Physical Included?	Virtual Included?
NBU CE (on 8.1)	20 FETB	Yes	Yes

- 5 new licenses NBU CE w/ Flexible Licensing
- Upgrade NBU CE 8.1 to 8.1.2

Customer entitlements before purchasing NBU CE w/ Flexible Licensing licenses?			
License Descriptions	Number of licenses	Physical workload multiplier applied	Virtual workload multiplier applied
NBU CE (8.1.2)	20	1	1
NBU CE w/ Flexible Licensing (8.1.2)	5	1	1.5

3.2.3. Platform Base – Big Data Workloads Edition

The NetBackup Platform Base - Big Data Workloads Edition (Base – Big Data Ed.) is an economical capacity-based licensing alternative for the protection of Big Data workloads. It provides a reduced capacity licensing fee for customers that need to back up large amounts of data concentrated on these storage systems. The Base - Big Data Ed. offering includes all the same features and functionality as Base - Complete Ed. and Base - Complete Ed. w/ Flexible Licensing but is limited to specific Big Data and NoSQL workloads such as Hadoop and HBase. Refer to the following Technote to understand what workloads are covered in each Platform Base offering.

To compare all editions, go to Licensing Overview

3.2.4. Platform Base – NDMP Edition

The NetBackup Platform Base - NDMP Edition (Base – NDMP Ed.) is an economical licensing alternative for the protection of file data on NAS filers using NDMP policies or NDMP data movers. It provides a reduced capacity licensing fee for customers that need to back up large amounts of data concentrated on these storage systems.

The Base - NDMP Ed. is only available for Front End Terabytes that are protected using NDMP and may not be used for any other purpose.

The Base - NDMP Ed. offering includes the Replication Director feature for the protection of NAS devices using snapshots and replication though storage system integration. The Base - NDMP Ed. only supports NDMP policy-based protection of filers as well as the use of the NDMP data mover in storage lifecycle policies. Customers requiring the flexibility of configuring Standard, Windows, or application policies in addition to NDMP policies require an upgrade to the Base – Complete Edition w/ Flexible Licensing.

Accelerator for NDMP is included as part of the Platform Base – NDMP Edition. However, other NetBackup Accelerator workloads are not supported with the Base - NDMP Ed. The use of other NetBackup Accelerator workloads (e.g. VMWare, files & folders, etc.) requires the Base – Complete Edition w/ Flexible Licensing Ed.

To compare all editions, go to Licensing Overview

3.2.5. Platform Base – Limited Edition

The NetBackup Platform Base - Limited Edition (Base – Limited Ed.) is a capacity licensing model for customers with smaller, less complex environments.

The Base – Limited Ed. is restricted to customers protecting less than 250 Front End Terabytes (across all NetBackup domains), restricted to Windows, Linux, and Solaris x86 systems installed in the environment, and cannot be combined with the Base – Complete Ed., Base – Complete Ed. w/ Flexible Licensing, Base - Big Data Workload or Base - NDMP Editions within the same NetBackup domain.

The Base - Limited Ed. has two licensing components: 1) A Front End Terabyte license and 2) an optional application agent/instance (i.e. the installed NetBackup application component) license for application-consistent recovery.

The Base - Limited Ed. is not recommended for customers close to 250 Front End Terabytes as a customer must upgrade all licenses to the Base - Complete Ed. w/ Flexible Licensing and/or the Base - NDMP Ed. once the total NetBackup environment grows above 250 TB's (i.e. total number of FETB's across all NetBackup domains).

Example 3: In Domain A, a customer was using the Traditional license model to back up 200 TB's and the customer was using Base - Limited Ed. in Domain B to backup 51 TB's then the customer would need to upgrade Domain B from Base - Limited Ed. to Base - Complete Ed. because the total amount of source data across both domains is greater than 250TB's (200 + 51 = 251). The 250TB restriction for the Base - Limited Ed. applies to the legal entity or entities for which the license has been granted.

Example 4: Parent Co. XYZ has Subsidiary A and Subsidiary B, and Subsidiary A purchases the license(s). By default, Subsidiary A and Subsidiary A alone receives the license entitlement. In this scenario, the 250TB restriction applies only to Subsidiary A because Subsidiary A is the only entity authorized to use the license. The scenario, where the purchasing legal entity is given the license(s) authorization, is the standard entitlement scenario. However, if special authorization has been granted to use license(s) across multiple legal entities, then the 250TB restriction would apply across all licensed entities.

Example 5: Parent Co. XYZ and its two subsidiaries were granted special authorization to use licenses across the three legal entities than the 250TB restriction would be calculated by taking the sum of all TB's backed up across all domains across all three legal entities.

[To compare all editions, go to Licensing Overview](#)

3.2.6. Platform Base – Windows & Linux Edition

The NetBackup Platform Base - Windows and Linux Edition licensing offer (Base – Windows & Linux Ed.) is only available to partners enrolled in [VSPP](#). You cannot combine a Base – Windows & Linux Ed. license with a Base - Complete Ed., Base – Complete Ed. w/ Flexible Licensing or Base – NDMP Ed. within the same NetBackup Domain.

3.2.7. Platform Base – Limited Edition Application and Database Add-on

The NetBackup Platform Base - Limited Edition Application and Database Add-on (Base – Ltd Ed. App & DB add-on) provides additional integration at a deeper level, enabling more reliable, application-consistent recovery. These add-ons are optional but highly recommended for protecting specific workloads.

The Base – Ltd Ed. App & DB add-on IS NOT licensed the same way as the Application and Database Pack on the Traditional license model. The Application and Database Pack on the Traditional model is licensed per tiered physical server/machine. The Application and Database Add-on on the Platform Base – Limited Edition is licensed per NetBackup application agent/instance (i.e. the installed NetBackup application component) and not per physical host regardless of whether the agent/instance is installed in a physical or virtual environment.

The Enterprise Vault agent is included in the Base – Limited Ed. license so an Application and Database Add-on is not needed to obtain this functionality.

The Base – Ltd Ed. App & DB add-on license(s) is required to leverage NetBackup Copilot functionality. The number of licenses required for NetBackup Copilot is determined by the number of NetBackup application agents/instances (i.e. installed NetBackup application components) installed on the clients leveraging NetBackup Copilot on the NetBackup Appliance.

3.3. NetBackup Platform Base Licensing Requirements

The NetBackup Platform Base license must be purchased for all front-end terabytes in the NetBackup domain. There should be no instances where the number of FETB backed up exceeds the number of FETB licensed; in this case the customer is out of compliance and must purchase additional FETB licenses. The Platform Base – Complete Edition, Platform Base – Big Data Workloads Edition, and the Platform Base – NDMP Edition, and NetBackup Enterprise Virtual Client can be utilized within the same domain or across multiple domains, as long as the total number of FETB is licensed separately for each Edition, but again, cannot mix the Platform Base licensing model and the Traditional licensing model within the same domain.

For a more detailed understanding of how Veritas measures FETB, please refer to the Admin Guide.

3.4. NetBackup Enterprise Virtual Client

NetBackup Enterprise Virtual Client (NEVC) is aimed at virtual environments, using the count of CPUs as the sole calculation meter. The Enterprise Virtual Client license offering enables customers to license NetBackup based on how many CPUs are used, rather than the number of NetBackup clients, agents, servers, and options deployed as with Traditional licensing, or the amount of source data protected as with the Platform Base license offerings. NetBackup Enterprise Virtual Client is used to protect VMware vSphere, Microsoft Hyper-V, Nutanix Acropolis Hypervisor (AHC), Openstack, Red Hat Virtualization (KVM), and AzureStack virtual environments only. Unix environments cannot be licensed with NEVC.

- NetBackup Enterprise Virtual Client licenses can be used in the same domain as Base – Complete Ed., NetBackup Platform Base – Big Data Edition, and NetBackup Platform Base – NDMP Edition. Software licensed under the traditional model must be in a separate NetBackup domain.
- NetBackup Enterprise Virtual Client license can be only be used to protect virtual environments although the associated media or master server(s) can be physical.

3.5. NetBackup Traditional Licensing Model

The Traditional (or "server") licensing model is based on the number of NetBackup clients, agents, servers, and options that NetBackup will be protecting or run on. A customer purchases the same number of licenses as the count of clients, agents, servers, and options. As they deploy additional NetBackup clients or servers or attach additional tape drives or storage to NetBackup, additional licenses for appropriate NetBackup products are required. If a server is protected by multiple Master Servers, a license is required for each Master Server Domain.

3.5.1. Hardware Tiers

Several NetBackup products on the Traditional licensing model use a tiered hardware license meter. For Veritas sales, to determine the correct server tier, please refer to the relevant tier matrix below. Partners, please ask your Veritas rep for assistance.

- [Server Tier Matrix](#)
- [NDMP Tier Matrix](#)

3.5.2. NetBackup Starter Packs

NetBackup Starter Packs are cost effective software packages designed to meet the backup and recovery needs of midsize, heterogeneous environments. Organizations with growing data protection needs, or who require online database protection and off-site tape management, can scale their NetBackup Starter Pack configuration with additional NetBackup clients, Application and Database Pack, and other options. The individual components included in the Starter Pack cannot be cross-graded to higher functioning products. For example, a NetBackup Server license in the Starter Pack cannot be upgraded to NetBackup Enterprise Server.

Starter Pack – 5 Client	Starter Pack – 20 Client	Starter Pack – 40 Client
• 5 clients (any OS) • 1 NetBackup Server (any OS, up to tier 2) • 1 tape drive license	• 20 clients (any OS) • 1 NetBackup Server (any OS, up to tier 2) • 1 tape drive license • 2 windows App & DB Pack (up to tier 2)	• 40 clients (any OS) • 1 NetBackup Server (any OS, up to tier 2) • 2 tape drives licenses • 3 windows App & DB Pack (up to tier 2)

3.5.3. Licensing Virtual Machines

All methods of virtual machine (VM) backup are included in the Traditional Licensing model which includes: NetBackup for VMware, NetBackup for Hyper-V, NetBackup for Nutanix Acropolis Hypervisor (AVH), AzureStack, OpenStack, Red Hat Virtualization (KVM). In summary, the guidelines for licensing virtual environments are:

- The license platform is determined by the physical host on which the Virtual Machines (VM) reside. For example, Hyper-V, VMware, Acropolis Hypervisor, XenServer hosts are x86, while a Solaris SPARC LDOM host is UNIX.
- The license tier is determined by the physical host system as documented in the HW tier appendix. The VM configurations do not apply.
- When a protected VM is copied, moved, or otherwise transferred between physical hosts, each participating physical host must be licensed, e.g. clustering, load-balancing, replication, etc.

If two NetBackup Master Servers (i.e. two separate NetBackup domains) protect a single client, two client licenses are required, one for each domain. Additionally, if two NetBackup Master Servers are installed on a single server, two licenses are required, one for each domain.

3.5.3.1. Licensing Agents/ Clients within the VM

This is the most straightforward method of virtual machine backups. Backup data is transferred from the guest VM to the NetBackup server over the LAN. When running a database application within a VM, it is recommended to use the associated NetBackup agent within the VM. When using a NetBackup client in one or more guest VMs, only one client license (Standard or Enterprise) is required for the entire physical host regardless of the number of VMs.

When using a NetBackup database/application agent in one or more guest VMs, only one Application & Database Pack license or SAP agent license is required per host server, regardless of how many VMs may be running a particular database or application, and regardless of how many application instances are running.

3.5.3.2. Licensing via agentless backup

One (1) Enterprise Client license is required for each Hyper-V host. If the Hyper-V host will also be used as a media server, a NetBackup Enterprise Server license is required in addition to the Enterprise Client license.

Performing an off-host backup of a Hyper-V VM snapshot requires that the NetBackup Windows client be installed on both the Hyper-V host and the off-host Windows client. However, for consistency with NetBackup for VMware licensing practices, the off-host capability is included in the Enterprise Client license of the Hyper-V host. Also, for Hyper-V clusters, any/only Hyper-V hosts (cluster nodes) that contain virtual machines protected by NetBackup require an Enterprise Client license. Also, licensing must account for any migration of VMs between nodes. In other words, if a set of cluster nodes are used to load-balance VMs, all nodes that participate must be licensed.

3.5.3.3. Licensing Cloud-based Workloads (BYOL)

NetBackup can be used to backup data residing on IaaS web services like Amazon EC2. In cases where the physical characteristics of a cloud system or workload are not measurable, the logical instance should be treated as a physical system for licensing purposes. The table below provides a mapping of traditional licenses for on-prem use to the cloud equivalent

Product	Meter	Mapping in CSP	Tiered Products				
				Tier 1	Tier 2	Tier 3	Tier 4
NetBackup Server	Per Tiered Server	1 CPU = 1 vCPU	Windows Unix	1 1-2	2-3 3-4	4-7 5-12	8+ 13+
NetBackup Enterprise Server	Per Tiered Server	1 CPU = 1 vCPU	Windows Unix	1 1-2	2-3 3-4	4-7 5-12	8+ 13+
NetBackup Standard Client	Per Client	1 Client = 1 Client					
NetBackup Enterprise Client	Per Tiered Server	1 CPU = 1 vCPU	Windows Unix	1 1-2	2-3 3-4	4-7 5-12	8+ 13+
NetBackup Application and Database Pack	Per Tiered Client	1 Client = x Hosts	Windows Unix	4 8	5 11	6 14	10 22
NetBackup Library Based Tape Drive	Per Tape Drive	N/A[1]					
NetBackup for NDMP	Per Tiered NAS Device	N/A[1]					
NetBackup Shared Storage Option	Per Shared Drive	N/A[1]					
NetBackup Vault Option Base Additional Drive Unlimited Drives (w/Base)	Per Master Server Per Tape Drive Per Master Server	N/A[1] N/A[1] N/A[1]					
NetBackup for SAP Agent	Per Tiered Server	1 Client = x Hosts	Windows Unix	4 8	5 11	6 14	10 22
NetBackup Data Protection Optimization Option	Per Front-End TB	FETB = FETB					
NetBackup Replication Director	Per Front-End TB	FETB = FETB					
NetBackup OpsCenter Analytics	Per Client	1 Client = 1 Client					

(1) No expected use case in the cloud. If one is identified, we will re-evaluate.

4. Traditional to Capacity Migration

4.1. Migrating Between Traditional and Platform Base Licensing Models

Customers may migrate between the Traditional and Platform Base licensing models. Migration is allowed within the requirements at the time of migration. Customers interested exploring this option can out to their Veritas Sales Representative for further detail about how to initiate the process.

5. Upgrades, Cross-grades, Evaluation Licenses

5.1. Version Upgrades

When a new version of NetBackup is released, customers on active maintenance/support contracts are entitled to upgrade their respective NetBackup licenses to the new version. This is called a version upgrade. Current customers generally receive an automatic notification email and letter that announces the availability of a new version and provides the serial number needed to register at the Customer Care License Portal. Customer Care should be able to help customers who did not receive this notification.

The preferred download method from FileConnect is the managed download. This is the better option because the download can resume if interrupted. The http download will restart the download process. If you have any issues generating their license keys at the License Portal, please pro-actively work with Customer Care.

5.2. Cross-grades

The term "cross-grade" is used to describe when a product or option of lesser functionality is upgraded to a product or option of greater functionality. Not all cross-grade scenarios are allowed.

Server to Enterprise Server
NetBackup Server and NetBackup Enterprise Server software share a common set of NetBackup Clients, Options and Agents. In the event an organization requires advanced snapshot-based, SAN, and data center scalability solutions, a NetBackup Server investment can be seamlessly upgraded to a NetBackup Enterprise Server solution.

Standard Client to Enterprise Client
To upgrade the performance often associated with standard client protection, NetBackup Enterprise Client software consolidates a variety of snapshot-based technologies into a single, easy to use data protection solution.

Platform Base - NDMP Ed. or Platform Base – Limited Ed. to Platform Base Complete
It is possible to upgrade from either Base – NDMP Ed. or Base – Limited Ed. to Base – Complete Ed. w/ Flexible Licensing.

5.3. Software Evaluation Licenses

Veritas provides prospects the opportunity to evaluate NetBackup for a limited time at no charge. An evaluation license key is good for 60 days with no support. Partners are encouraged to leverage trialware on Veritas.com where available.

Partner/Distribution Account Managers may leverage the existing Internal Enterprise NFR Process to request complimentary software on their partner's behalf.

6. Maintenance/ Support

Veritas offers two levels of support, Essential Support and Basic Maintenance. Basic Maintenance is only available in India, Japan, and Korea. Additionally, Veritas offers Business Critical Services, the highest level of support, optimization, and stabilization for NetBackup, providing options for on-site assistance, advanced access to technical specialists, accelerated service level targets, proactive account reviews, and dedicated account management.

The NetBackup support page at Veritas Support includes a set of useful links to documentation, upgrades, tools and statuses. It is recommended to access this page frequently.

7. General Examples

Measuring FETB

A customer with 2500 clients, each with 100GB of data to be protected on them, would have: 2500*100GB = 25,000GB = 24.4TB [25,000 / 1024 = 24.4] of front end data.

Because most customers see the amount of primary storage that they need protecting growing on a monthly basis, this customer would want to purchase the capacity required to accommodate this growth. If this customer expected 10% growth in source data per year, they should add 10% to the total license amount (2.44 TB + 24.4 TB = 26.8) for a total of 27 TB.

Platform Base Licensing

The size of the total environment is 10 terabytes, 3 of the terabytes are protected using NDMP. The licensing requirements would be the following:

- 7 terabytes of the NetBackup Platform Base – Complete Edition
- 3 terabytes of the NetBackup Platform Base – NDMP Edition

Platform Base Limited Edition -Licensing

Example 1: Parent Co. XYZ has Subsidiary A and Subsidiary B. Subsidiary A purchased the license(s) then, by default, Subsidiary A and Subsidiary A alone receives the license entitlement. In this scenario, the 250TB restriction applies only to Subsidiary A because Subsidiary A is the only entity authorized to use the license. The scenario, where the purchasing legal entity is given the license(s) authorization, is the standard entitlement scenario. However, if special authorization has been granted to use license(s) across multiple legal entities then the 250TB restriction would apply across all licensed entities.

Example 2: Parent Co. XYZ and its two subsidiaries were granted special authorization to use licenses across the three legal entities than the 250TB restriction would be calculated by taking the sum of all TB's backed up across all domains across all three legal entities.

Quantity Tiered Platform Base Licensing

A customer bought 500 NetBackup Platform Base Complete licenses 1 year ago to cover 500 terabytes of data. The customer now wants to purchase an additional 50 terabytes of the NetBackup Platform Base license. Since historical terabytes purchased are not accounted for when choosing the correct SKU/band, the customer should purchase 50 of the '11 – 50 TBs' Platform Base Complete SKU.

NetBackup for NDMP

Example 1: A NetApp FAS3050c has two clustered heads with only one active controller. A single NDMP Tier 3 license is required. If both controllers are active a single NDMP Tier 4 license is required.

Example 2: An EMC NS84 has four data movers (according to EMC, the last digit is the number of data movers). A single NDMP Tier 4 license is required.

OpsCenter Analytics Option

Example 1: Mixed Backup Products: Customer has 100 backup clients, including 2 master servers and 10 media servers. Customer would buy 100 OpsCenter Analytics client licenses.

Example 2: Virtual Machines: Customer has 10 virtual machines running on a single physical server, 5 running Linux and 5 running Windows. Customer would buy one (1) OpsCenter Analytics client license (license per physical host).

NetBackup Vault

A customer either uses NetBackup Vault to duplicate backup images from a VTL to a 10-drive physical tape library or uses Storage Lifecycle Polices to perform backup image duplication but uses NetBackup Vault to track tapes sent off-site. This would require a NetBackup Vault Base license and six NetBackup Vault Additional Drive licenses.

Virtual Environment Scenarios

Deployment Example		Licensing Variables	Required Licenses
NetBackup clients & agents in VMs NetBackup clients & DB agents are installed within the VMs for LAN backups	• 4-socket x86 host • XenServer • 5 Windows VMs • 3 Linux VMs • 1 Oracle+WIN VM • 1 Oracle+Linux VM This example applies to any x86 hypervisor, not just XenServer.	• x86 (XenServer) • Tier 3 (see HW tier guide)	• 1 Standard Client for all VMs • Total: 1 Standard Client • 1 Pack for all Oracle instances in all VMs • Total: 1 App/DB Pack
NetBackup for Hyper-V Identical to example #2. Enterprise Client license is also required for NetBackup for Hyper-V	• 4-socket x86 host • Hyper-V • 5 Windows VMs • 3 Linux VMs • 1 SQL+WIN VM • 1 Oracle+Linux VM	• x86 (Hyper-V) • Tier 3 (see HW tier guide)	• 1 Enterprise Client for all VMs • Total: 1 Enterprise Client • 1 Pack for all Oracle and SQL Server instances in all VMs • Total: 1 App/DB Pack
Virtualized NetBackup Master Servers and Clients on the same host. NetBackup clients are installed within the VMs.	• 1-socket x86 host • Linux KVM • 12 Linux VMs • 2 NetBackup Masters on Linux VMs	• x86 (Linux KVM) • Tier 1 (see HW tier guide)	• 1 Standard Client for all VMs in each domain • Total: 2 Standard Clients • 1 Enterprise Server for each master server

Two Linux master servers are deployed in VMs.			• Total: 2 Enterprise Servers for each domain

8. Frequently Asked Questions

NetBackup Platform Base – NDMP Edition says you cannot use NetBackup Accelerator because the licensing model does not include Standard Client. However, Enterprise Server is licensed AND a NetBackup Appliance supports Accelerator, so can I mount an NFS share from a NetApp filer on an Appliance and use Accelerator with the Platform Base – NDMP base license?

Accelerator for NDMP is included as part of the Platform Base – NDMP Edition. However, other NetBackup Accelerator workloads are not supported with the NDMP Edition. Even though you can use an NFS mount on an Appliance you still cannot use Accelerator for non-NDMP workloads with an NDMP Edition. The customer would have to upgrade any capacity they want Accelerator for from the NDMP Edition to Complete Edition in order to get Standard Client enabled.

How do customers enable client licenses for 10 virtual machines on NetBackup?

Customers will not get separate license keys for the virtual machines as we don't license VMs, just the physical hosts. All client license keys are entered only on master servers and media servers. Once an Enterprise Client key is entered on the master server, you can install the client on as many VMs as you like; there is no need for an individual key for each virtual machine

If a customer purchased the NetBackup Appliance in order to use it as a media server while using OST to backup data to Data Domain, what license will the customer need to enable OST and can the customer use the disk pool of the NetBackup appliance as a normal disk pool instead of a dedupe disk pool?

The customer will need to buy the Data Protection Optimization Option as it contains the Advanced Disk functionality supported by the Appliance. With regards to the disk pool, the customer can use the disk pool of the NetBackup appliance as a normal disk pool instead of a dedupe disk pool but with the right NetBackup licenses along with it.

Does the customer need to include Enterprise Vault data as well when calculating FETB to buy the Platform Base – Complete Edition?

Yes, the customer needs to include EV data as well. In traditional licensing, EV licenses include NetBackup EV agent and SQL agent at no extra cost. You only need to buy Standard Client for each EV server. However, with Platform Base licensing, anything that NetBackup protects must be included in the FETB capacity for licensing. This means that the capacity of the EV vault stores that you're protecting must be licensed.

If a customer has SAP with Oracle, is an App+DB Pack required or just NetBackup for SAP?

For SAP on Oracle or Max DB, license NetBackup for SAP. For SAP on other databases (e.g. DB2, SQL Server), or if the customer prefers to backup the underlying Oracle database through Oracle instead of through SAP, license the App+DB Pack.

How many licenses are needed if two NetBackup Master Servers (i.e. two separate NetBackup domains) protect a single client?

Two client licenses are required, one for each domain. Additionally, if two NetBackup Master Servers are installed on a single server, two licenses are required, one for each domain. For example, a single physical host running multiple virtual machines including Exchange and SQL Server would require one (1) Application and Database Pack license to cover all Exchange and SQL Server instances on the physical host, regardless of how many VMs may be running these two applications.

9. Useful Links

- For a list of supported platforms, operating systems, and snapshot methods that Snapshot Client supports for certain backup methods, please refer to the NetBackup OS Compatibility Guide
- For an updated list of supported primary storage systems, hardware snapshot technologies, NDMP devices, tape drives, virtual tapes and libraries, please refer to the NetBackup Hardware Compatibility Matrix.
- For a complete list of all NetBackup supported clustering products, refer to NetBackup Cluster Compatibility List
- Additional NetBackup Support Information.

10. Appendix

The following chart provides the same detail as the table presented in the Licensing Overview section but with more granular detail.

NetBackup Product/Feature	Platform Base Complete Edition	Platform Base Big Data Workloads Edition	Platform Base NDMP Edition	Platform Base Limited Edition	NEVC
NetBackup Server	✓	✓	✓	✓	
NetBackup Enterprise Server	✓	✓	✓	✓	✓
NetBackup Standard Client	✓	✓		✓	
NetBackup Enterprise Client	✓	✓		✓	✓
NetBackup Application and Database Pack	✓	✓		✓	✓
NetBackup Application and Database Add-on					
NetBackup Library Based Tape Drive	✓	✓	✓	✓	
NetBackup for NDMP	✓	✓	✓	✓	
NetBackup Shared Storage Option	✓	✓	✓	✓	✓
NetBackup Vault Option – Base[1]	✓	✓	✓	✓	
Additional Drive	✓	✓	✓	✓	
NetBackup for SAP Agent	✓	✓			
NetBackup Data Protection Optimization Option	✓	✓	✓	✓	✓
NetBackup Replication Director	✓	✓	✓	✓	
NetBackup OpsCenter Analytics	✓	✓	✓	✓	
NetBackup Self Service	✓	✓			
NetBackup Cloud Catalyst	Include in DPOO				
NetBackup Enterprise Vault Agent				✓	

(1) Vault Base Option includes 4 tape drives