Vembu BDR Suite - Overview
Vembu Technologies

Experience

100+ Countries

Headquartered in Chennai
Vembu BDR Suite

Vembu BDR Suite is a portfolio of products designed to backup multiple environments from virtual to physical to cloud while addressing diverse and advanced use cases.

- **VMBackup**: Backup & Replication for VMware and Hyper-V
- **ImageBackup**: Backup & BMR for Physical Windows Servers and Desktops
- **NetworkBackup**: Backup for files/folders & applications
- **OffsiteDR**: Replicate a copy of your backup data off-site
Vembu Cloud Services

Vembu Cloud Services is a simple and cost-effective backup solution for small and mid-sized businesses. Users can protect their data residing in physical and virtual environments directly to Vembu Cloud.

- **OnlineBackup**: Backup files/folders and applications directly to Vembu Cloud.
- **SaaSBackup**: Backup SaaS applications like Office 365 and Google Apps to Vembu Cloud.
- **CloudDR**: Replicate an additional copy of backed up data to Vembu Cloud.
- **BDR360**: Monitor and manage all backups from a centralized portal.
Understanding RPO and RTO

RTO (Recovery Time Objective)
Time duration to recover a backed up machine after disaster

Until which point in time you can recover the machine data after disaster
Recovery Time Objective (RTO)

- The time taken for a business to recover from the occurrence of a disaster is RTO.
- Downtime is not something every business can afford.
- With Vembu, you can recover your virtual machines within a matter of minutes.
- Vembu adheres to the industry best RTO and RPO of <15 minutes.
Recovery Point Objective (RPO)

- The RPO for your business can be set by the maximum amount of data that you can afford to lose if disaster strikes.
- With Vembu, you can retain even years worth of data.
- You can also backup as frequently as every 15 minutes.
- Also, near Continuous Data Protection ensures that you don’t lose even minutes’ worth of data.
Vembu VMBackup

- It caters to the needs of virtualized (VMware & Hyper-V) data centers
- Agentless VMware backup and replication with high-performance snapshots
- Agentless Microsoft Hyper-V backup with forever incrementals
- Optional Cloud Backup for data redundancy and disaster recovery
- Point-in-time persistent instant boot of backed up VMs
- Instant VM recovery
- Instant File-level Recovery
- Failover and Failback
- Instant granular recovery support for Exchange, SQL, SharePoint and AD
Vembu ImageBackup

- It caters to the needs of data centers with physical windows servers
- Physical Server Image Backup for Microsoft Windows Servers & Workstations
- It can be configured and managed directly from Vembu BDR Server
- Application aware processing
- Optional Cloud Backup for data redundancy and disaster recovery
- Instant VM recovery on any hypervisor within few minutes
- Instant File-level Recovery
- Instant granular recovery support for Exchange, SQL, SharePoint and AD
- Bare-metal Recovery
Vembu NetworkBackup

- Endpoint backup for Windows, Mac & Linux
- Supports backup of File Servers and Applications (MS Exchange, SQL, SharePoint, Active Directory, Outlook, etc.)
- Offsite backup deployment support for Remote Office & Branch Offices
- Support for Hybrid Cloud (On-premise with optional cloud storage) deployment
- AES 256-bit Encryption, both at-rest and in-flight
- Advanced Retention policies
- Automatic scheduling and Bandwidth throttling for backups
Vembu OffsiteDR

- Send an additional copy of backup data to your own data center for DR
- Syncs backup data immediately
- Control over data transfer - Automatic scheduling and Bandwidth throttling
- Quick VM recovery
- Instant file-level recovery
- Rebuild Vembu BDR Backup Server from the secondary storage repositories
- Supports seed migration from BDR backup server to OffsiteDR Server
Vembu OnlineBackup

- Backup business-critical data directly to Vembu Cloud
- Backup desktop/laptops, File Servers, Microsoft Exchange, SQL-Server, SharePoint, Outlook, Active Directory, etc. to Vembu Cloud
- A single solution for your Windows, Mac & Linux
- End-to-end encryption
- Perform granular recovery of files, folders, emails, mailboxes and tables
Vembu SaaSBackup

Google Apps

- Backup entire mailbox of the users (Inbox, Sent-Items, Deleted, Drafts, user created labels)
- Chat, Contacts and Calendars
- All documents from Google Drive

Office 365

- Backup entire mailbox of the users (Inbox, Sent-Items, Deleted, Drafts, user created labels)
- Contacts, Calendars
- OneDrive for business
• You can keep an additional copy of backup data on Vembu Cloud
• Vembu Cloud is deployed on Amazon Web Services across all continents
• Vembu Cloud Servers are running in clustered environment for high availability
• Restore anywhere and anytime
• Backup data is encrypted in-flight and at rest
Vembu Universal Explorer

It is a tool that helps you recover individual items from various Microsoft Application backups like Exchange, SQL, SharePoint and AD.

- Instantly restore emails/mailboxes from MS Exchange
- Instantly restore MS SQL databases and tables
- Restore documents of MS SharePoint
- Granularly recover MS Active Directory items
Vembu Recovery CD

- Perform Bare-Metal Recovery of the backed up physical machine
- Recover entire disk or a particular partition of the backed up virtual or physical machine
- BCD boot configuration to configure the corrupted boot sector
- Inject VMDK driver directly to backed up data
- Perform P2P and V2P platform migrations
Environment

- Vembu BDR Backup Server, OffsiteDR Server, VMBackup Client, ImageBackup Client, NetworkBackup Client and OnlineBackup Client can be installed on physical or virtual machines.
- It depends on size of the environment.
- Small business may use virtual machine for Vembu BDR backup server and OffsiteDR server.
- It is recommended to install the backup software on a physical server to avail instant boot feature.
On-premise Deployment - Simple

- Setup DR site in your local environment and backup via LAN connections
- Backup VMs, Physical machines and applications to the local storage repositories
Hybrid Deployment - Scenario 1 (OffsiteDR)

- Setup DR site in your local environment and backup via LAN connections
- Send another copy of backup data to your datacenter via LAN/WAN connection
Hybrid Deployment - Scenario 2 (CloudDR)

- Setup DR site in your local environment and backup via LAN connections
- Send another copy of backup data to Vembu Cloud via WAN connection
Offsite (or) Remote Deployment (CSP)

- Cloud Service Providers can host Vembu OffsiteDR Server on their data center
- They can backup another copy of data from Vembu BDR Backup Servers to their data center over WAN
Remote office/Branch office

- Setup Vembu BDR backup server and Vembu Offsite DR server in remote office as well as branch office
- Sync backup data between both the locations
Backup Server Clustering

- You can easily scale up the backup server when backup load increases
- Backup requests will be equally shared between each backup server
Cloud Backup

- Vembu Cloud servers are hosted in Amazon Web Services
- Install the client agent and backup directly to Vembu Cloud via WAN
Application Aware Process

Application-aware process is to create consistent database snapshots.

- This option allows you to stop the backup if any of the MS application writers are in an unstable state

- Transaction log files can also be truncated. If not, then they can accumulate until they fill all the available disk space
Compression and Encryption

- The backup data is compressed to reduce the storage needs.

- The backup data is also encrypted using AES 256 algorithm both in-flight and at rest.

- Users can save multiple customized encryption passwords along with a unique hint to ensure double protection for the backed up data.
Backup Verification

- Backup verification can be automated to run post completion of every backup schedule or once in a day

- In the process, booting of backed up VM will be carried out and screenshot of boot screen will be captured. The screenshot details will be sent to the administrators via email
Efficient Storage Management

Vembu BDR Backup Server utilizes VembuHIVE™ file system to effectively manage storage repositories.

- Supports SAN, NAS and DAS
- Automatically scale up/scale out the storage devices
- In-built version control and error correction
- In-built Compression & Encryption
Migration Plan (P2V and V2V)

Vembu supports migration of machines from one environment to another.

- Vembu supports instant creation of VMDK, VHD and RAW files for backed up virtual/physical machines
- Users can instantly start migrations like P2V (Physical to virtual) and V2V (between virtual environments)
Native Tape Backup

Vembu Native Tape Backup support helps organisations in implementing the best known 3-2-1 backup strategy of having 3 copies of your data in 2 different storage media and 1 backup copy offsite.

- Backing up to Tape is the only feasible option for long-term archival
- Automatically copy the backup data stored in Vembu BDR server to Tape Storage
- Media pools can be created for specific set of backup jobs and data can be efficiently archived
Vembu BDR Suite - Architecture

Vembu Portal

Vembu BDR Server

LAN/WAN

Vembu OffsiteDR Server

LAN

WAN

Vembu Cloud & CloudDR

Office 365

G Suite

VMBackup

ImageBackup

NetworkBackup

OnlineBackup

SaaSBackup
Vembu BDR Backup Server

- BDR Backup Server can be installed on Windows and Ubuntu OS, on Windows or Linux based Physical or Virtual machines
- Virtual Appliance available for VMware vSphere & Microsoft Hyper-V
- VMware, Hyper-V and Image backups can be configured and managed from BDR Backup Server GUI
- Redundant copy of the backup data can be sent to own data center or to Vembu Cloud
- Configure and manage Storage Repositories
- Run backup and recovery verifications
Storage Repositories

- Works with SAN, NAS and DAS
- Backup data is compressed and encrypted before being stored in the repos
- Easily scale up when storage requirements increase
- Since Vembu uses its own file system (VembuHIVE File System), you can use various file systems in the same repository
- Backed up data is stored in the form of multiple chunk files, to improve the disk & application performance
- Configure and manage storage from the backup server
Vembu VMBackup Client (proxy)

- This client is used to backup VMware and Hyper-V virtual machines.
- It works as a proxy between the hypervisors and Vembu Backup Server.
- Applies compression and encryption before sending the data to BDR backup server.
- Replicates VM data from one VMware vSphere/Microsoft Hyper-V to another for High Availability.
- Agent can be installed on Windows based physical or virtual machines.
Vembu ImageBackup Client (proxy)

- This client is used to backup Microsoft Windows Server, Desktops and Laptops
- ImageBackup Client agent needs to be installed on each physical servers and desktops which need to be backed up
- It creates the snapshot of the selected disks by using Microsoft VSS
- The snapshot is compressed and encrypted before leaving the source machine
- The changes are tracked after the initial full backup and only the modifications are transferred to the repos
- Agent can be installed on Windows based physical or virtual machine
Vembu NetworkBackup Client (proxy)

- This client is used to backup selected files/folders and applications such as MS Exchange, SQL, SharePoint, AD, Outlook, etc.
- It can be installed on Windows, Linux and Mac based physical or virtual machines
- It creates the snapshot of the selected disks by using Microsoft VSS
- This client agent needs to be installed on machines having files and applications
- Applies compression, encryption before sending the data to Vembu Backup Server
- Supports backing up files from network shares
Vembu OnlineBackup Client (proxy)

- This client is used to backup selected files/folders and applications such as MS Exchange, SQL, SharePoint, AD, Outlook, etc.
- The data is backed up directly to Vembu Cloud via WAN
- It can be installed on Windows, Linux and Mac based physical or virtual machines
- This client agent needs to be installed on machines having files and applications
- Applies compression, encryption before sending the data to Vembu Backup Server
- Supports backing up files from network shares
Vembu SaaSBackup

- Backup Google Apps and Microsoft Office 365
- You can signup an account in Vembu Cloud
- SaaSBackup agent will backup the selected user data by communicating with Google Apps/Office 365 through secured connection
- You can restore the backed up data anytime and anywhere
Vembu OffsiteDR

- Instantly transfer backup data from the BDR Backup Server to the OffsiteDR server
- Allows you to set up Disaster Recovery server in your data center
- Accepts backup data from multiple Vembu BDR Backup Servers
- You can rebuild the backup server from secondary storage repositories
- Offer DRaaS by running the backed up images in your cloud during disaster
- Vembu OffsiteDR Server can be installed on Windows and Linux based Virtual or Physical machines
- Virtual appliances available for VMware vSphere and Microsoft Hyper-V
Vembu CloudDR

- Customers can send an additional copy of data to Vembu Cloud for disaster recovery purpose
- Vembu CloudDR servers are running in Vembu Cloud and they handle backup requests from Vembu BDR Backup Server
- You can restore the data from Vembu Cloud anytime and anywhere
- Backup data instantly syncs to Vembu CloudDR server once stored in primary repository
Vembu Cloud

- Vembu Cloud Servers are running on highly secured Amazon Web Services across all continents
- The servers will be automatically scaled while receiving huge loads
- The servers run in clustered environment to avoid backup interruptions
- Vembu Cloud Servers accepts backup data directly from Vembu OnlineBackup clients and Vembu BDR Backup Servers as well
- Through centralized Vembu Customer Portal, you can manage and monitor all your backup jobs
Vembu Portal

- Sign up for Vembu Portal account to activate the license after trial period
- Purchase and Renew licenses
- Manage purchased licenses
- Track all your purchase and billing information
- Activate Vembu BDR Backup Server and Vembu OffsiteDR Server after trial period with Vembu Portal account
System Requirements
Vembu BDR Backup Server

Supported Windows OS
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows MultiPoint Server 2012
- Windows Server 2008
- Windows 10 (Pro, Enterprise, Enterprise LTSB)

Supported Linux OS
- Ubuntu 16.04 LTS
- Ubuntu 14.04 LTS
- Ubuntu 12.04 LTS

Architecture
- 64 bit only

Memory
- Minimum: 8 GB
- Recommended: 16 GB

CPU
- Minimum: Quad Core Processor
- Recommended: Octa Core Processor

Network Card
- 1 Gbps & above

Browser
- IE v11, Firefox v28 & above and Chrome v34 & above
# Vembu OffsiteDR Server

## Supported Windows OS
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows MultiPoint Server 2012
- Windows Server 2008
- Windows 10 (Pro, Enterprise, Enterprise LTSB)

## Supported Linux OS
- Ubuntu 16.04 LTS
- Ubuntu 14.04 LTS
- Ubuntu 12.04 LTS

## Architecture
- 64 bit only

## Memory
- Minimum: 8 GB
- Recommended: 16 GB

## CPU
- Minimum: Quad Core Processor
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## Network Card
- 1 Gbps & above

## Browser
- IE v11, Firefox v28 & above and Chrome v34 & above
## VMware vSphere Infrastructure

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<tr>
<th>Platform</th>
<th>Hypervisor</th>
<th>Management Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMware vSphere 6.7</td>
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<td>● Windows 10</td>
</tr>
<tr>
<td>● Windows Server 2008 R2</td>
<td>● Windows Nano Server</td>
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</table>
Vembu ImageBackup

**Supported Platforms OS**
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows Server 2008 SP2 & above
- Windows Small Business Server 2011
- Windows Small Business Server 2008
- Windows 10
- Windows 8 & 8.1
- Windows 7

**Memory**
- Minimum: 2 GB
- Recommended: 4 GB

**CPU**
- Minimum: Dual Core Processor

**Browser**
- IE v11, Firefox v28 & above and Chrome v34 & above
## Vembu NetworkBackup

### Supported Platforms

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<tr>
<td></td>
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## Vembu NetworkBackup (Cont..)

### Windows Platform

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<th>Supported Applications</th>
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<pre><code>                             | Microsoft Exchange Server DAG 2016, 2013, 2010 |
</code></pre>
<p>| <strong>Microsoft Sharepoint Server</strong> | Microsoft Sharepoint Server 2013, 2010, 2007(WSS3.0), 2003(WSS2.0) |
| <strong>MySQL Server</strong>              | MySQL 5.7, 5.5, 5.1, 5.0                       |</p>
## Vembu OnlineBackup

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<td><strong>MySQL Server</strong></td>
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Licensing
License

- The license for VMware and Hyper-V are provided based on the number of CPU-sockets.
- Physical Windows Servers are licensed based on the number of physical server machines to be backed up.
- The licenses for Windows desktops/laptops are provided free of cost.
- License has to be purchased for each application in case of application backup.
- Vembu provides two types of licenses - Subscription and Perpetual.
Managing licenses

- To buy licenses, create an account for your company in Vembu Portal ([https://portal.vembu.com](https://portal.vembu.com))
- Once you have successfully signed up, you can choose and pay for the licenses by clicking on ‘Buy’ tab
- Purchased licenses will be allocated to your account immediately and you can view them under ‘License’ tab
- The licenses will automatically be mapped to your existing backup jobs
- All BDR Backup Servers must communicate with Vembu Portal Server for license availability
Pricing

- Licensing is available in two models - Subscription and Perpetual
- Subscription based license allows you to purchase licenses for 1-, 2-, 3- and 5-year periods
- Subscription license includes free updates and major product upgrades
- Perpetual license allows you to purchase the license for a 10-year period
- With Perpetual license, maintenance and support is free for the first year, after which the users have to pay 20% of the license cost to avail support
- For more details on pricing, visit https://www.vembu.com/vembu-bdr-suite-pricing/
Thank You

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