



# Bacula Enterprise 2023

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# Agenda



























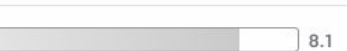


- A Empresa
- Players de Backup e Gartner
- Backups Hoje
- Bacula Community e Enterprise
- Arquitetura Bacula Enterprise
- Características
- Cases
- Modelos de Precificação e Contratação
- Serviços



- De um dos Fundadores da Autodesk e do Bacula Community, Kern Sibbald
- Fabricante com sede na Suíça, presença em todos os continentes
- Suporte e equipe certificada também no Brasil
- Missão: *Fornecer o melhor e mais acessível Sistema de Backup e Restauração de Dados*

# Avaliações G2

	 <b>Bacula Enterprise</b>	 <b>IBM Spectrum Protect</b>	 <b>Commvault Backup &amp; ...</b>	 <b>Veritas NetBackup</b>
Star Rating	★★★★☆ 51 reviews	★★★★☆ 56 reviews	★★★★☆ 71 reviews	★★★★☆ 100 reviews
Market Segments	Mid-Market (60.4% of reviews) ⓘ	Enterprise (69.2% of reviews) ⓘ	Mid-Market (51.5% of reviews) ⓘ	Enterprise (54.3% of reviews) ⓘ
Ease of Use	 8.6 Responses: 39	 6.7 Responses: 39	 7.4 Responses: 54	 7.9 Responses: 85
Ease of Setup	 7.4 Responses: 33	 6.5 Responses: 32	 6.7 Responses: 46	 7.4 Responses: 58
Ease of Admin	 8.0 Responses: 34	 6.8 Responses: 32	 7.7 Responses: 48	 7.9 Responses: 57
Quality of Support	 9.6 Responses: 38	 7.5 Responses: 38	 8.7 Responses: 53	 7.9 Responses: 78
Security Standards	 9.2 Responses: 21	Not enough data available	Not enough data available	 8.1 Responses: 7
Cloud Data Protection	 9.6 Responses: 12	Not enough data available	Not enough data available	 8.7 Responses: 5
Data Deduplication	 9.5 Responses: 21	Not enough data available	 9.5 Responses: 7	 8.1 Responses: 7

# Avaliações TrustRadius e Gartner

 **Bacula Enterprise** 



 Score 9.5 out of 10

Based on 42 reviews and ratings

 **Commvault Complete Data Protection**



 Score 8.4 out of 10

Based on 195 reviews and ratings

 **IBM Spectrum Protect Plus**



 Score 8.1 out of 10

Based on 16 reviews and ratings

 **Veritas NetBackup**



 Score 7.9 out of 10

Based on 80 reviews and ratings

**Gartner**®



Honorable Mention in 2022 Gartner® Magic Quadrant™  
for Enterprise Backup and Recovery Software Solutions

Gartner  
Peer **Insights**™



**Bacula Enterprise Reviews**

by Bacula in Enterprise Backup and Recovery Software Solutions  
4.8 ★★★★★

# Bacula Community vs Enterprise



## Community

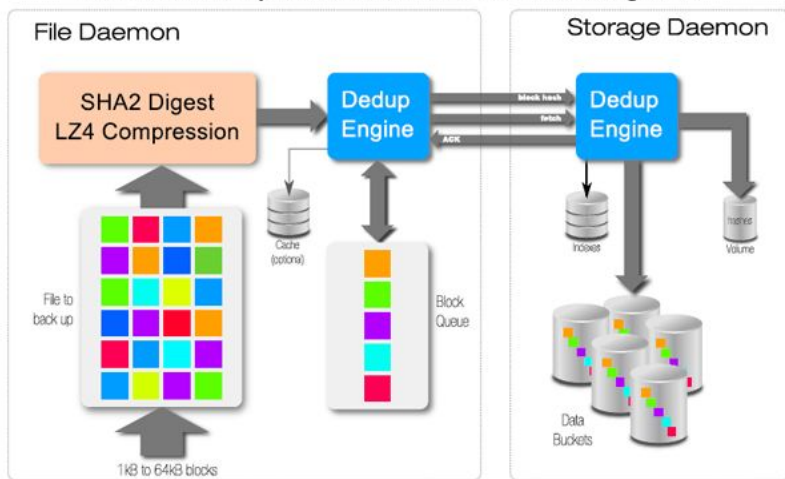
- Licença Livre (GPL).
- Código aberto.
- Pacotes da comunidade ou compilados pelo usuário.
- Necessário desenvolver plugins ou usar script.
- Catálogo e backup de formato aberto.

## Enterprise

- Investimento em Licenças.
- Código proprietário.
- Pacotes aprovados.
- Suporte do desenvolvedor.
- Interface gráfica única com poucos cliques.
- Mais de 30 plugins de aplicativos específicos.
- Deduplicação global e armazenamento.
- Catálogo e formato abertos.

- Deduplicação Global (na origem ou somente storage). *Até 99% de redução no tráfego e armazenamento.*
- CBT para outras Virtualizações (RHV, XEN etc.)
- Primeiros Plugins para Backup de **Dados em S3, Docker, Kubernetes, Proxmox, Hadoop HDFS, PostgreSQL, MySQL** etc.
- Formato de Catálogo e de Backup Abertos (**sem aprisionamento**)
- Driver de armazenamento **com Dedup** em Object Storage para todas as nuvens

Benefit from Deduplication on both the client and storage side

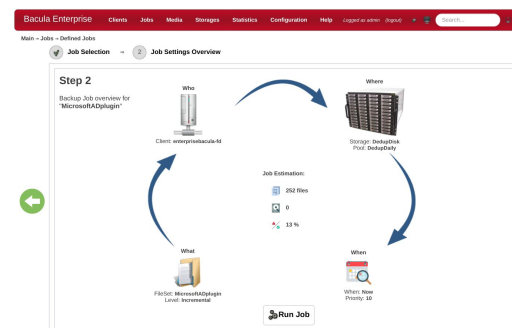


# Outras Vantagens

**BACULA**  
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- Altíssima Escalabilidade (**poucas conseguem fazer backup de 10.000 hosts ou mais**).
- Equipe de Desenvolvimento própria, e **não é uma suíte!**
- Todas comunicações criptografadas automaticamente, com **certificado FIPS**
- Maior quantidade de clientes para plataformas: **Unix, AIX, HPUX, Power, Debian, Slackware, FreeBSD, RHV, SUSE, Android, Windows, MacOS** etc.
- Mais avançada Interface Web do Mercado, sem requerer **Java/Flash**. Deploy/update remoto de agentes, etc.





# Ransomware

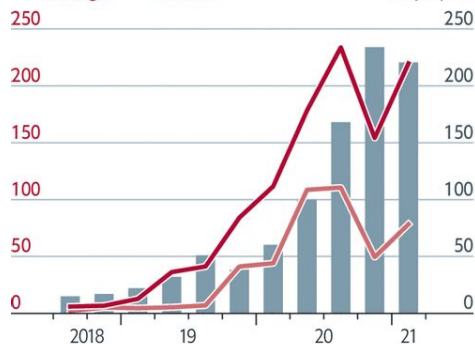
- 2FA
- Volumes imutáveis
- NAS Object Lock
- Ransomware detection
- Antivírus integrado
- Conexão socket própria
- Servidor primariamente **Linux**
- Processos dedicados não-privilegiados

## Striking oil

United States

Ransom payments, \$'000

— Average — Median



Sources: Coveware; Colonial Pipeline Company

The Economist

Cryptolocker 2.0

Your personal files are encrypted



Your files will be lost without payment on:

11/24/2013 3:16:34 PM

Info

Your **important files** were encrypted on this computer: photos, videos, documents, etc. You can verify this by click on see files and try to open them.

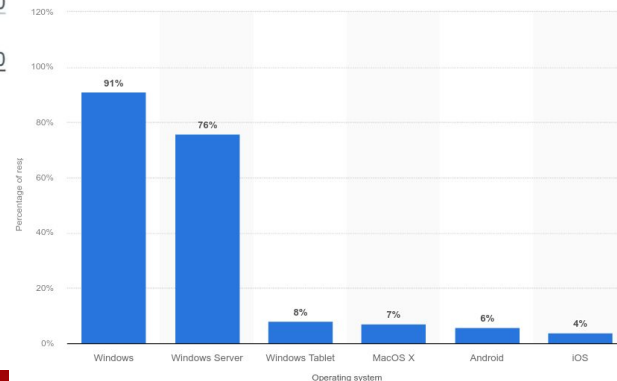
Encryption was produced using **unique public key RSA-4096** generated for this computer. To decrypt files, you need to obtain **private key**.

The single copy of the private key, which will allow you to decrypt the files, is located on a secret server on the Internet, **the server will destroy the key within 72 hours after encryption completed**. After that, nobody and never will be able to restore files.

**To retrieve** the private key, you need to pay 0.5 bitcoins.

Click **proceed to payment** to obtain private key.

**Any attempt to remove or damage this software will lead to immediate private key destruction by server.**



# Ransomware

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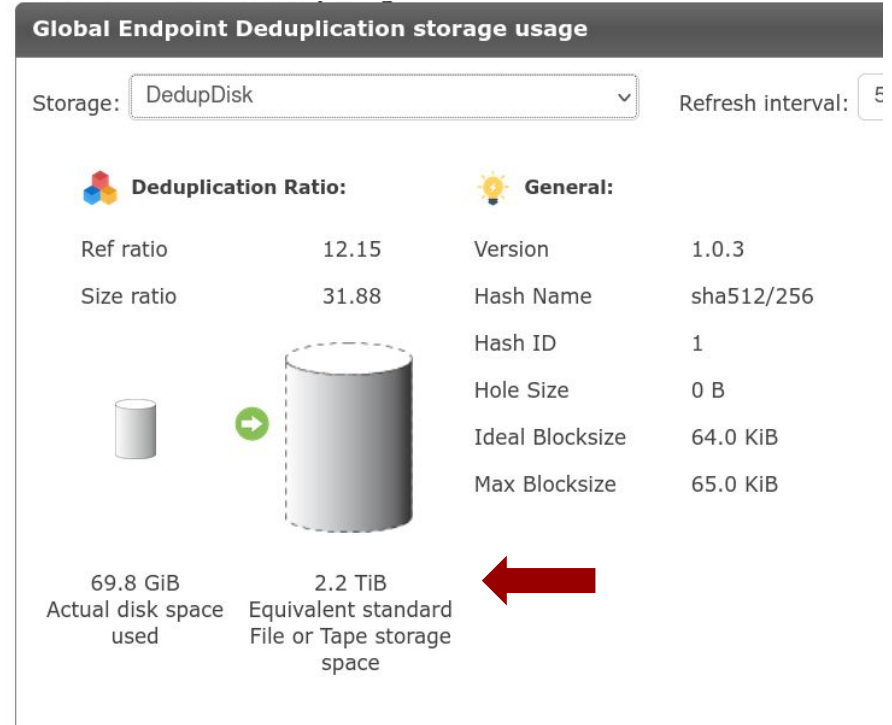


- Catálogo externo com cluster ou PaaS (ex. OCI)
- Suporte nativo desde a concepção de **gravação direta em todas as fitas, cartuchos, VTL, WORM etc.**
- **Suporte a SIEMs (ex.: Wazuh)**

**wazuh.**

# Backups Hoje

- Backup é a redundância de qualquer dado que pode ser usada para restaurar sua forma original [Guise]
- Desafio: Dados digitais criados pelo mundo dobram a cada dois anos - **44 Zettabytes** em 2020 [IDC]
- **Deduplicação Global** e Escalabilidade são fatores chaves
- **Ransomware** reafirma a necessidade de backup



# Backups Hoje

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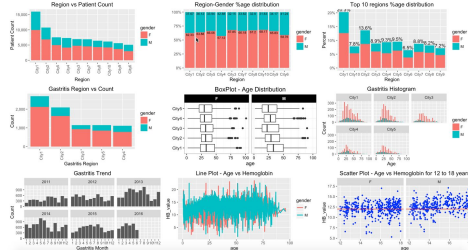
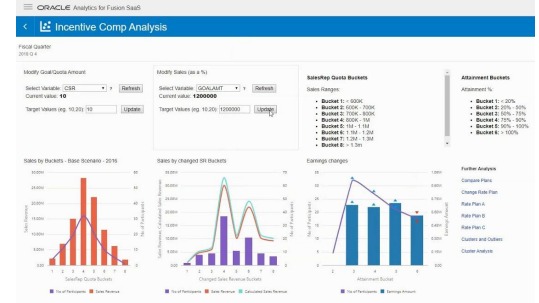
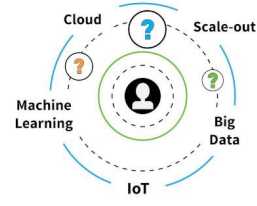
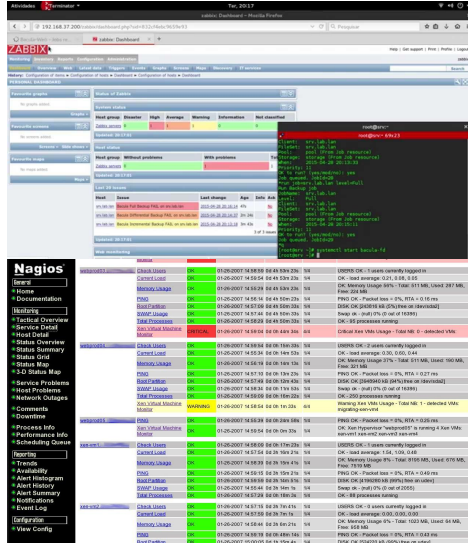
## MULTI-LEVEL DISASTER RECOVERY



## Os Três Níveis de DR

- **Nível de Dados.** Proteção dos dados de usuários e aplicações (dumps, cópia de arquivos)
- **Nível de Aplicação.** Continuidade da aplicação (PITR, CDP, plugins para vasta gama de aplicações)
- **Nível de SO.** Reduzir o tempo de recuperação do sistema para o menor possível (export de VM, CDP, snapshot de FS, Bare Metal)

O Software de Backup **não deve ser um monólito**, mas Permitir a Mineração de Dados de seus Metadados (entre outros): “sem esses recursos, um backup produto está estagnado e não é capaz de crescer dentro de um ambiente” [Guise]



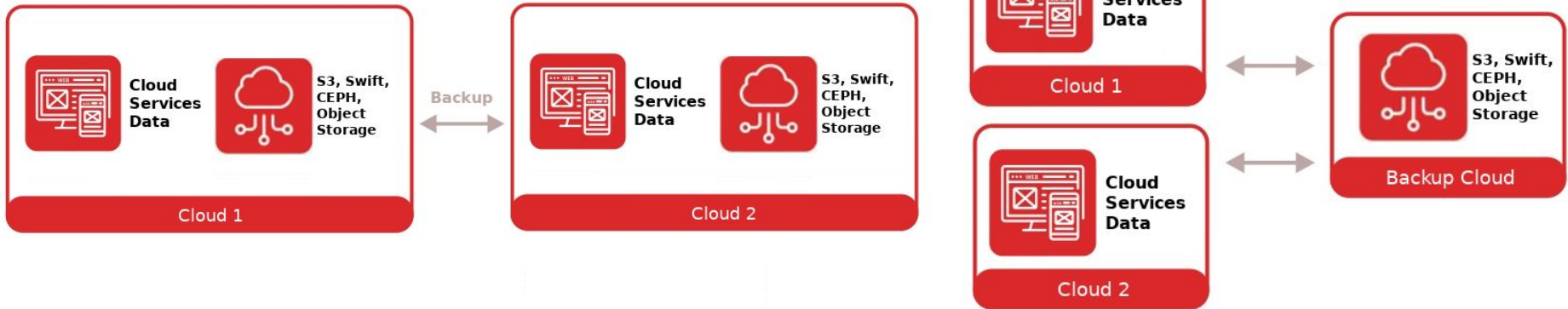
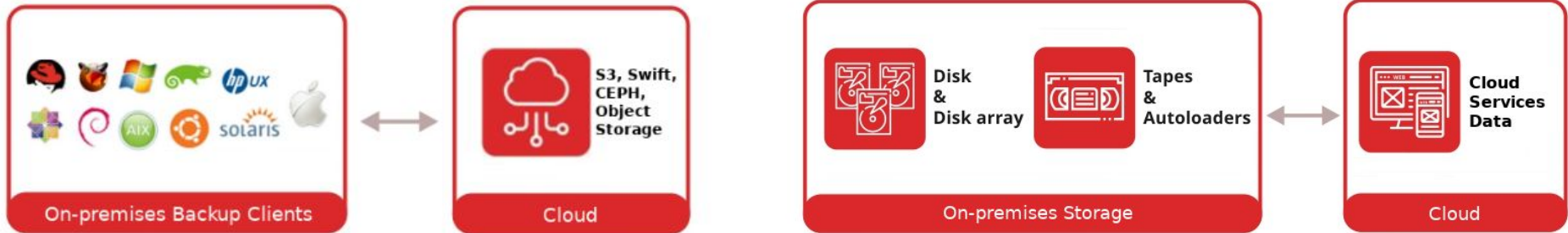
# Storage em Nuvem

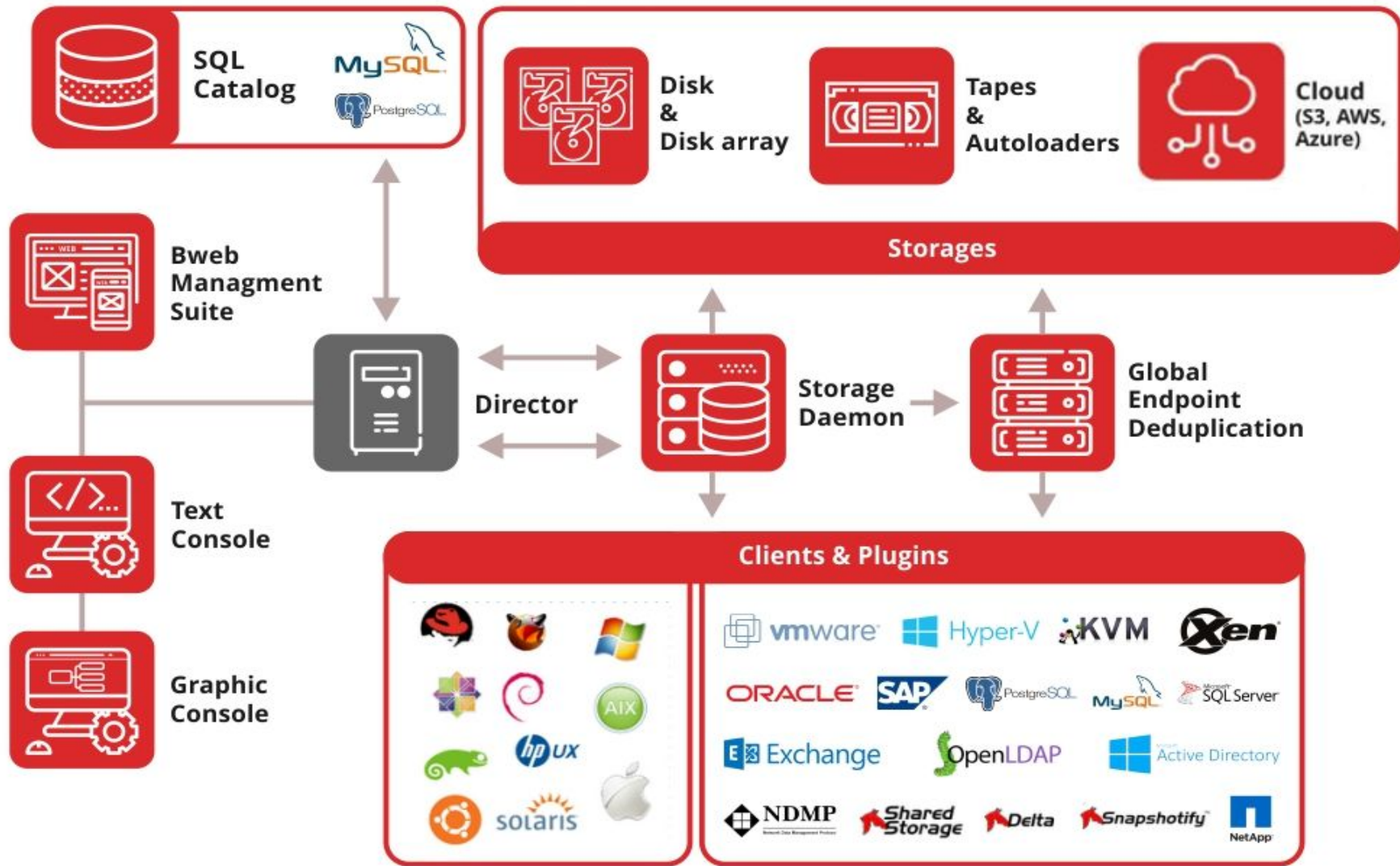
**BACULA**  
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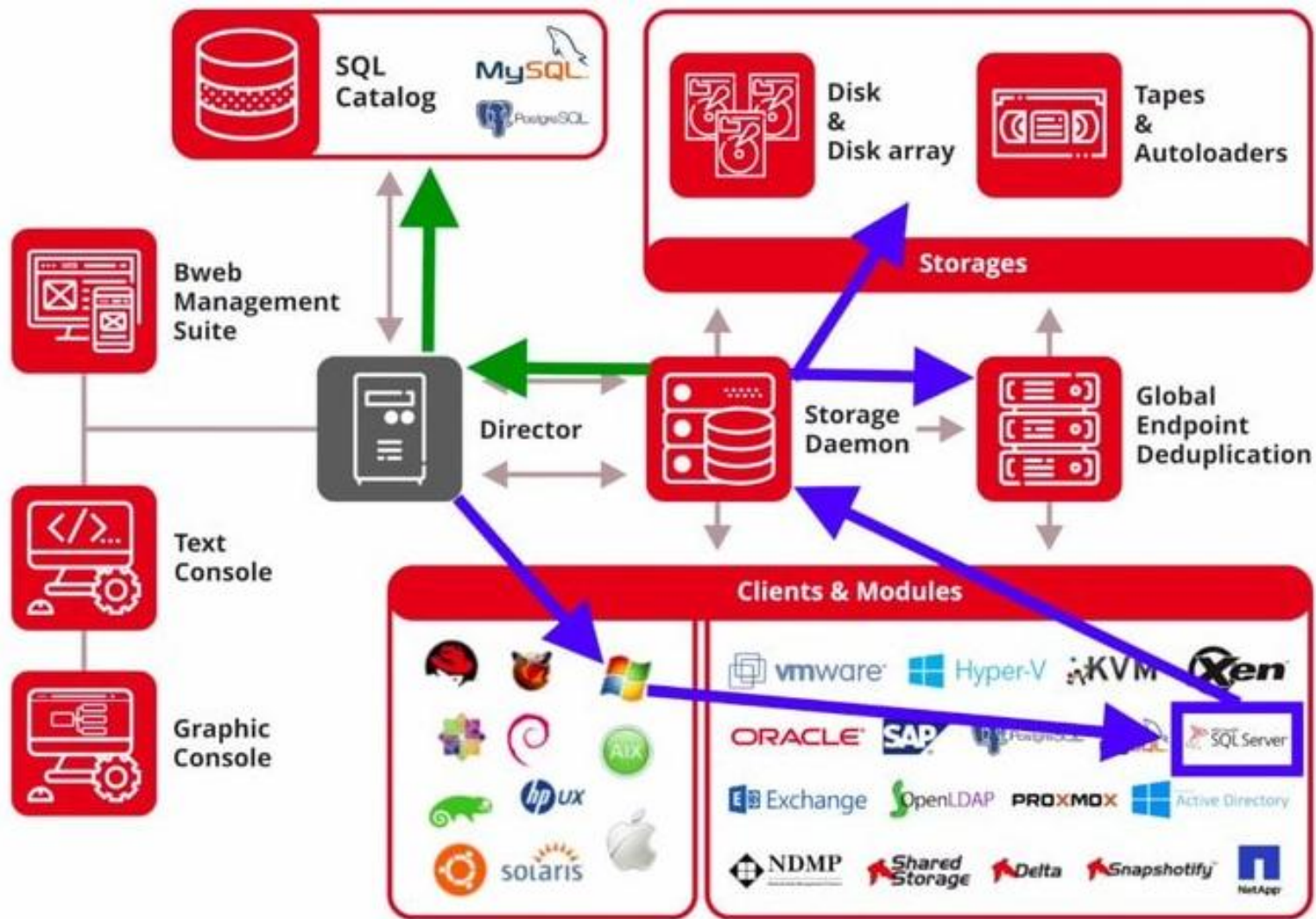
- Cold Storage
- Imutabilidade
- Dedup











# Director (servidor de backup, master)



- Gestor central dos Jobs e da autenticação entre os serviços.
- Contém agendamentos, configurações, retenções, políticas, etc.
- ★ **Escalável** (mais de 10.000 clientes)
- ★ Pode ser Virtualizado
- ★ Focado em Automação
- ★ Auto Recuperação de Desastres

# Storage Daemon (nó de armazenamento)

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- ★ Sem tarifação por quantidade SDs
- ★ Nuvem S3, Swift, CEPH etc.
- ★ Discos internos, externos, RDX.
- ★ Robôs-de-fitas, Cartuchos e VTL
- ★ Infinitos Storages Daemons ligados a um mesmo Director



- ★ Deduplicação no armazenamento por software ou hardware
- ★ Diferentes níveis de compactação via software
- ★ Alta Escalabilidade
- ★ **Opção Criptografia somente no Storage**
- ★ **Cluster de Storage**
- ★ **Appliance de backup integrado**

# File Daemon (cliente de backup)

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- ★ **Silent/Orchestration Install**
- ★ Autenticação segura (senha ou chaves)
- ★ Sistemas Legados

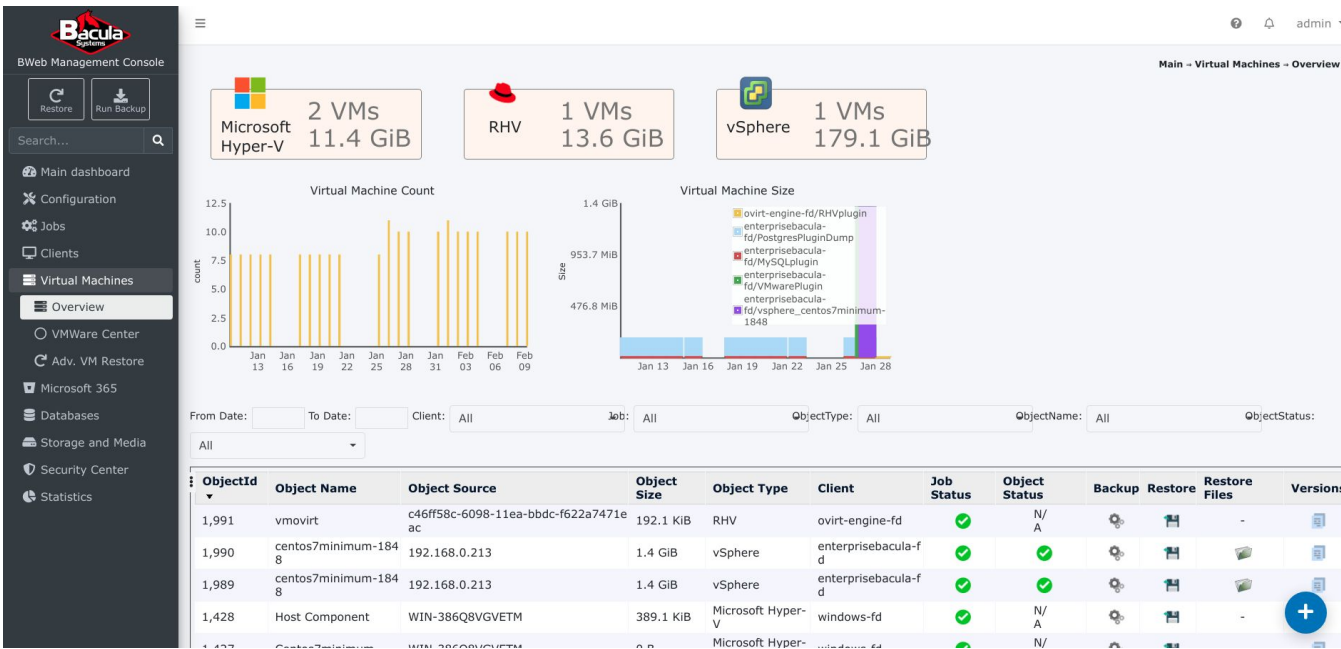
- ★ **Função de Inventário**
- ★ **Diferencial em Nível de Metadados**
- ★ Mínimo Impacto
- ★ Scripts antes e depois dos Jobs



- ★ Livre de plugins Java/Flash para o navegador
- ★ Painéis de Auditoria e **Cyber Segurança**
- ★ Self-restore
- ★ Grupos de Clientes
- ★ ACLs de Usuário e Perfis
- ★ Gestão de Mídias e Armazenamento
- ★ Módulos de Monitoração, Estatística e Relatórios
- ★ Operação dos Plugins



The screenshot displays the Bacula BWeb Management Console interface. The main dashboard includes four summary cards: 8 Clients, 165.1 MB Catalog Size, 860.4 GB Total Bytes Stored on 357 Media, and 4529 Total Jobs. Below these are sections for Running Jobs and Last Jobs (limited to 10). The Last Jobs table is as follows:

JobId	Client	Job Name	Comment	FileSet	Level	End Time	Duration	Job Files	Job Bytes	Avg Speed	Errors	Tags	Status
10,022	proxmox-fd	ProxmoxPluginVHCentos		ProxmoxpluginCentos	F	2022-01-26 11:11:27	00:01:25	2	20.2 MiB	24.84 MiB/s	0		✓
10,021	enterprisebacula-fd	VMwarePlugin		VMwarePlugin	D	2022-01-26 09:54:22	00:01:35	8	1.4 GiB	14.62 MiB/s	0		✓
10,020	enterprisebacula-fd	VMwarePlugin		VMwarePlugin	D	2022-01-26 09:49:53	00:00:06	1	0 B	0.00 MiB/s	3		⚠
10,014	enterprisebacula-fd	VMwarePlugin		VMwarePlugin	D	2022-01-25 15:37:10	00:00:28	1	0 B	0.00 MiB/s	3		⚠
10,015	enterprisebacula-fd	pgsql_c1		pgsql_c1	D	2022-01-25 15:37:57	00:00:51	333	127.8 MiB	2.51 MiB/s	1		⚠
10,016	enterprisebacula-fd	pgsql_c2		pgsql_c2	D	2022-01-25 15:38:16	00:01:04	609	79.4 MiB	1.24 MiB/s	2		⚠
10,017	enterprisebacula-fd	pgsql_c3		pgsql_c3	D	2022-01-25 15:38:30	00:00:50	665	79.7 MiB	1.59 MiB/s	0		✓
10,018	enterprisebacula-fd	vsphere_centos7minimum-1848		vsphere_centos7minimum-1848	D	2022-01-25 15:38:02	00:00:04	1	0 B	0.00 MiB/s	3		⚠



- ★ Operação 100% gráfica
- ★ Design Centrado no Usuário
- ★ Operações com Poucos Cliques
- ★ Integração com o AD/LDAP
- ★ **Configuração e deploy de clients**
- ★ **App Mobile**

Running Job OraclePlugin.2019-01-07\_22:29:58\_21 on oracle-fd

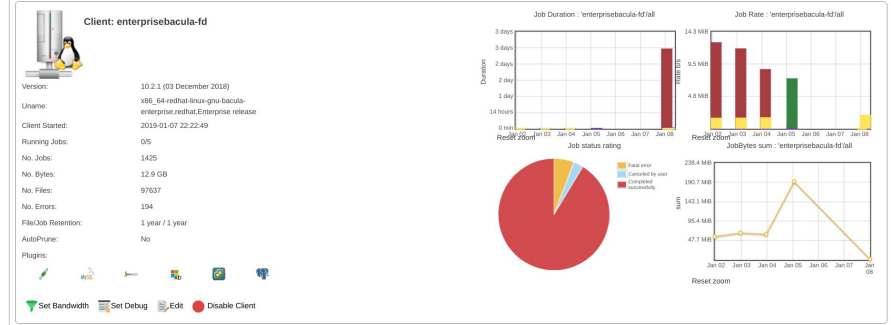
**Job Name:** OraclePlugin.2019-01-07\_22:29:58\_21 (2,774)  
**Processing file:** /@ORACLE/cdb1\APEX\_040200\user.sql  
**Speed:** 72 B/s  
**Files Examined:** 8  
**Files Backed up:** 8  
**Bytes done:**   
**Files done:**   
**Bytes:** 1,748

Job Report: OraclePlugin on oracle-fd (2774)

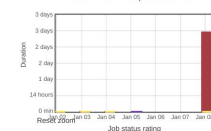
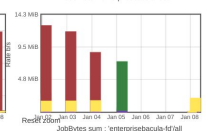
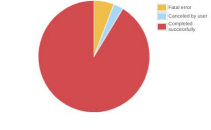
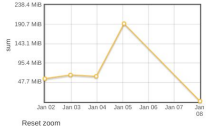
2019-01-07 22:29:50 oracle-fd JobId 2774: DIR and FD clocks differ by -9 seconds, FD automatically compensating.  
 2019-01-07 22:38:00 enterprisebacula-dir JobId 2774: Start Backup JobId 2774, Job=OraclePlugin.2019-01-07\_22:29:58\_21  
 2019-01-07 22:38:00 enterprisebacula-dir JobId 2774: Using Device "FileChgr1-Dev2" to write.  
 2019-01-07 22:38:00 enterprisebacula-dir JobId 2774: FD compression disabled for this Job because AllowCompress=No in Storage resource.  
 2019-01-07 22:38:00 enterprisebacula-sd JobId 2774: Volume "dedupDaily-74" previously written, moving to end of data.  
 2019-01-07 22:38:00 enterprisebacula-sd JobId 2774: Ready to append to end of Volume "dedupDaily-74" size=1,922,059

Main - Clients - Client Status enterprisebacula 3 minutes

Client: enterprisebacula-fd



**Version:** 10.2.1 (03 December 2018)  
**Uname:** x86\_64-redhat-linux-gnu-bacula-enterprise-redhat.Enterprise release  
**Client Started:** 2019-01-07 22:22:49  
**Running Jobs:** 0/5  
**No. Jobs:** 1425  
**No. Bytes:** 12.9 GB  
**No. Files:** 97637  
**No. Errors:** 194  
**FileJob Retention:** 1 year / 1 year  
**AutoPrune:** No  
**Plugins:**

**Job Duration:** 'enterprisebacula-fd'   
**Job Rate:** 'enterprisebacula-fd'   
**Job status rating:**   
**Jobilities sum:** 'enterprisebacula-fd' 

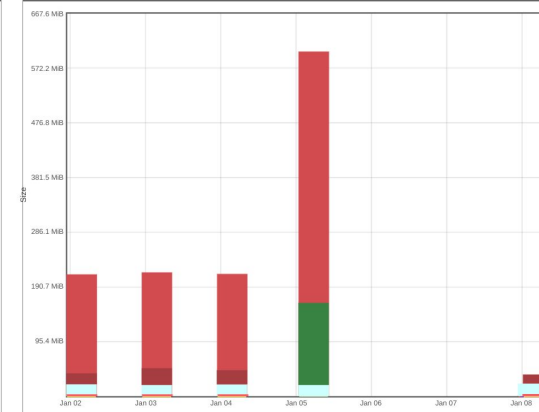
**Running Jobs**  
 No job running on the Client.  
**Terminated Jobs**

Main - Statistics - Statistics

Options

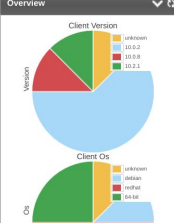
**Level:** Any **Status:** OK  
**Age:** This week **Size:** Width: 800 Height: 600  
**Clients:** enterprisebacula-fd, hyper-fd, mssql-fd, oracle-fd, ovirt-engine-fd, proxmox-fd, test, test-fd  
**Job Name:** BackupImages, BackupVideo, BaculaAdminTask, BaculaAudio, BaculaCatalog, BaculaConfigurations, BaculaFileCompressor, HyperVPlugin, LDAPPlugin, MicrosoftADPlugin, mssqlBacula, MSSQLPluginCluster, MySQLPlugin, NewJob, OraclePlugin

**Groups:** databases, hypervisors

**Current graph**  


Main - Clients - Clients

Overview



**Client Version:** 10.2.1 (03 Dec 2018), 10.10.0, 10.10.8, 10.2.1.2  
**Client OS:** Unknown, Debian, Oracle, S4.12

Clients

Name	Select	Desc	Auto Prune	File Retention	Job Retention
enterprisebacula-fd	<input type="checkbox"/>	10.2.1 (03Dec18) x86_64-redhat-linux-gnu-bacula-enterprise-redhat.Enterprise release	0	365 days	365 days
hyper-fd	<input type="checkbox"/>	10.0.2 (30May18) Microsoft (build 9200), 64-bit,Cross-compile,Win64	0	365 days	365 days
mssql-fd	<input type="checkbox"/>	10.0.8 (22Oct18) Microsoft (build 9200), 64-bit,Cross-compile,Win64	0	365 days	365 days
oracle-fd	<input type="checkbox"/>	10.0.2 (30May18) x86_64-redhat-linux-gnu-bacula-enterprise-redhat,	0	365 days	365 days
ovirt-engine-fd	<input type="checkbox"/>	10.0.2 (30May18) x86_64-redhat-linux-gnu-bacula-enterprise-redhat,	0	365 days	365 days
proxmox-fd	<input type="checkbox"/>	10.0.2 (30May18) x86_64-pc-linux-gnu-bacula-enterprise,debian.9.0	0	365 days	365 days
test	<input type="checkbox"/>	10.0.2 (30May18) x86_64-pc-linux-gnu-bacula-enterprise,debian.9.0	0	365 days	365 days
test-fd	<input type="checkbox"/>	10.0.2 (30May18) x86_64-redhat-linux-gnu-bacula-enterprise-redhat,	0	365 days	365 days

### Actions

- View Who Depends On It
- Set Default Linux Options
- Set Default Windows Options
- Add Filter

### Edit Fileset VMwarePlugin

Fileset Name: VMwarePlugin

Description:

Enable VSS:

Ignore Fileset Changes:

Enable Snapshot:

Include: [Add Include list](#)  
[Compression Dedup Signature] Plugin: index

Exclude:

### Current Changes

### Help

To get help about Directives, click on the Directive label and the

### VMware resource browser

Path: /ha-datacenter/VMS

- ..
- ..
- centos7minimum
- teste-restore

### Storage Overview

Set Debug Network Test Storage: DedupDisk Refresh: 30 seconds Device: Media Type: Device Type: Device Status:

Device: Single Device

Legend: ■ Queued ■ Progress ■ Done ■ Error ■ Cancelled ■ Unknown

Uploads: No upload transfer available

Downloads: No download transfer available

Device Details:

- Device Type: Cloud
- Media Type: CloudAWS
- Device Status: Not running (Idle)
- Cache (Free/Total): 272.81 GB / 369.98 GB
- Status: ▲ Cloud Status

Device Name▲	Status	Loaded	Volume Name	Slot	Running Jobs/Max. Jobs	Speed
AWS						
0/20						

Autochanger: FileChgr1

Device Details:

- Device Type: Dedup
- Media Type: Dedup
- Device Status: Not running (Idle)
- Space (Free/Total): 272.81 GB / 369.98 GB

Device Name▲	Status	Loaded	Volume Name	Slot	Running Jobs/Max. Jobs	Speed
FileChgr1-Dev1	-	-	-	05	-	-
FileChgr1-Dev2	-	-	-	05	-	-

Autochanger: FileChgr2

Device Details:

- Device Type: File

### Main - Statistics - Dedup Usage

#### Global Endpoint Deduplication storage usage

Storage: DedupDisk Refresh interval: 5 minutes

**Deduplication Ratio:**

Ref ratio: 6.63

Size ratio: 14.13

34.2 GB Actual disk space used

482.8 GB Equivalent standard File or Tape storage space

**General:**

Version: 10.3

Hash Name: sha512/256

Hash ID: 1

Hole Size: 4.0 MB

Ideal Blocksize: 64.0 KiB

Max Blocksize: 65.0 KiB

**Statistics:**

Transaction: 2476

Hash Count: 1,205,527

Ref Count: 7,994,509

482.8 GiB

Dedupengine Errors: 0

Containers Errors: 0

**Containers statistics**

Chunk Used: 1,205,527

Chunk Allocated: 1,889,390

Disk Space Used: 34.2 GiB

Disk Space Allocated: 71.4 GiB

Container Sum Bitarray Capacity: 33.0 MB

Read Chunk: 0

Calc Hash: 784

Update Refont: 0

Query Hash: 2138

New Hash: 681

Vacuum:

Start Time: 2018-10-29 17:14:48

End Time: 2018-10-29 17:14:55

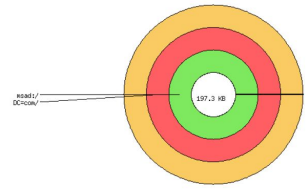
Orphan Addr: undefined

Ref Count: 0

Ref Size: 0 B

#### Global Endpoint Deduplication storage containers

ID▲	Block Used	Block Capacity	Unused Disk Space	Disk Space	Bitarray Capacity	Usage	Usage Map
1	3	4	1024 B	8.0 KiB	524288	75%	
2	6,483	9,551	6.0 MiB	18.7 MiB	524288	67%	
3	10,941	13,774	6.3 MiB	40.4 MiB	524288	79%	
4	10,628	12,865	8.7 MiB	50.3 MiB	524288	82%	
5	5,574	7,063	7.3 MiB	34.5 MiB	524288	78%	





# Wizards do BWeb

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Bacula Enterprise Workset Clients Jobs FileSets Schedules Pools Consoles Storages Messages

### Configure new Backup Policy 1/3

This assistant will guide you to create a new Retention Policy. The optimal Pool and Schedule configuration will be computed from your requirements, and a Job template (JobDefa) will be created. If you have special requirements such as keeping the first backup of the year during 5 years, we recommend to add it later manually.

**Recovery Window**  
The Recovery Window represents the period over your files will be available for restore, and the period over Recovery Points will be taken.

30 Days

**Recovery Points**  
The number of recovery points (Full, Differential and Incremental backup Job) that Bacula will Keep. For example, having 30 Recovery Points over a Recovery Window of 30 days means that Bacula will run a backup everyday. Having 60 Recovery Points over 30 days means that Bacula will run a backup twice a day.

30

**File Copies**  
How many copies of each file should be kept on your Storage area? Depending on your requirements, you may want to avoid keeping all eggs in one basket.

4

Refresh Estimation Cancel Next

### Resource Usage Estimation

**Estimation Data**  
Backup Size: 10 GB  
Change Rate: 10 %

**Estimation Results**  
Full Backup Size: 40.0 GB  
Incremental Backup Size: 26.0 GB  
Average Total Size: 66.0 GB  
Peak Size: 66.0 GB

**Size / Number of Copies**


Size	Number of Copies
74.5 GB	1
59.9 GB	2
37.3 GB	3
15.4 GB	4

Bacula Enterprise Workset Clients Jobs FileSets Schedules Pools Consoles

### Configure new Backup Job resource 5/5

**When?**  
Finally, you need to specify when the Backup Job should run. If the Schedule is not yet defined in the configuration, just add it now.

Schedule Name:



Cancel Prev Next

Jobs FileSets Schedules Pools Consoles

### 2/3

...ts, you need now to specify your Backup requirements such as how much time the Job can run.

Can run after: 03 : 00 AM

Should be canceled after: 2 Hours

Cancel Prev Next

<http://www.bacula.com.br/demo-online-bweb-bacula-enterprise/>

# Portal de Autosserviço BCloud

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- Usuários regulares podem configurar o backup e a restauração de seus dados
- Gerenciamento de faturamento e cotas
- Permite às empresas fornecer backup como serviço (**Backup-as-a-Service - BaaS**)

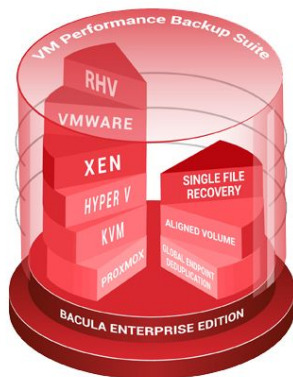
The screenshot displays the Bacula web interface. At the top, there are icons for 'My data' and 'Download center'. Below this is a 'Backup job list' section with filters for Level, Status, and time range. A table shows a backup job for client 'Wanderlei' at level 'F' on 07/05/18 at 16:31:56, with a duration of 00:01:09, 66 job files, 51.0 MiB of data, and an average speed of 0.74 MiB/s. The 'Backup' section provides details for the last backup: Last Backup: Wanderlei, Last Backup Time: 05/07/18 16:31:56, Size of the Last Backup: 0 B, Total Size: 51.1 MiB (0 B). The 'Next Backup' section shows a table with columns for Name and Scheduled Time, listing 'Wanderlei'. The 'Running jobs' section shows a table with columns for Name, Start Time, Job Bytes, Job Files, and Action, listing 'Wanderlei' with 0 job bytes and 0 job files. On the right side, there are buttons for 'Select files to restore', 'Restore History', 'Delete Client', and 'Delete this Client', along with a note that client deletion is permanent.

# Plugins VMs

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- VMware
- Hyper-v
- KVM
- Xen
- Proxmox
- RHEL/oVirt
- Nutanix
- **Azure**



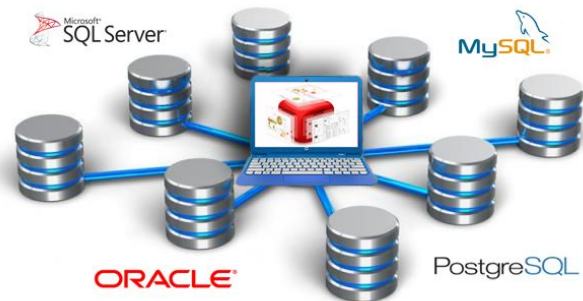
- ★ Backup sem Cliente
- ★ Auto-Descoberta de Novas Máquinas
- ★ Backup Diferencial no Nível de Bloco
- ★ Restauração Automática de VMs
- ★ Restauração granular de um arquivo
- ★ Instant Recovery

# Plugins DBs

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- MYSQL
  - PostgreSQL
  - Oracle DB
  - SAP
  - SAP Hana
  - Sybase ASE
  - MS SQL
  - Active Directory
  - LDAP
  - MongoDB
  - DB2
  - Cassandra
- ★ **Auto-Descoberta de Novos Bancos**
  - ★ **Paralelismo**
  - ★ **Backups Diferenciais e Incrementais**
  - ★ **PITR / Archive Log**
  - ★ **Restauração Granular e Automática**
  - ★ **Backup de Clusters**



# Outros Plugins



- **Microsoft 365**
- **Google Workspace**
- **Backup de S3**
- **CDP (replicação de arquivos e VMs\*)**
- **Docker, Kubernetes, OpenShift, Swift**
- **Hadoop HDFS**
- **Bare Metal Linux e Windows (P2V, P2C, V2C etc.)**
- **Zimbra, MS Exchange**

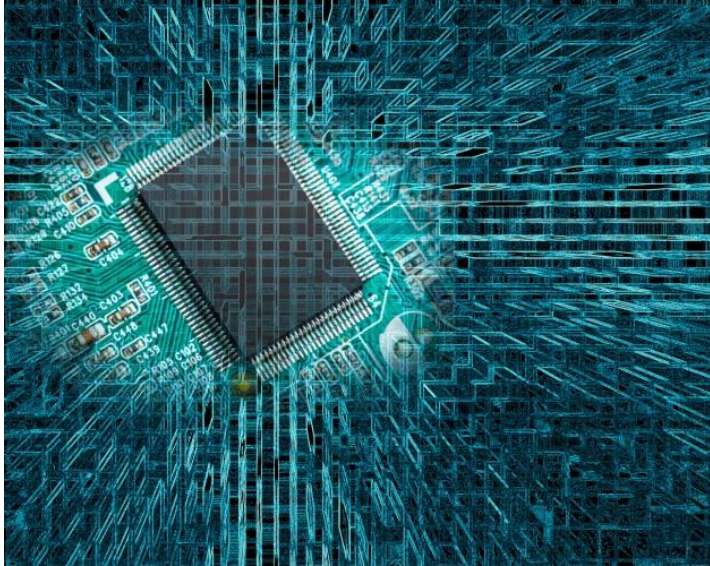
- **Sharepoint**
- **VSS**
- **Snapshot Linux (LVM, ZFS, BTRFS etc.)**
- **bpipe**
- **Delta**
- **NDMP**
- **Shared Storage SAN**
- **Incremental Netapp**
- **Cloud (Oracle, Amazon Glacier, Google, Azure, Swift e S3)**

Google Workspace



# Outras Funcionalidades

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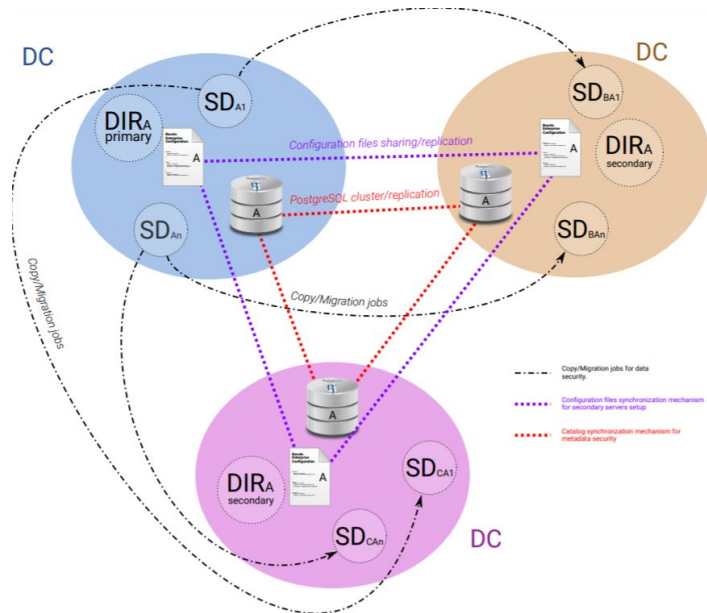
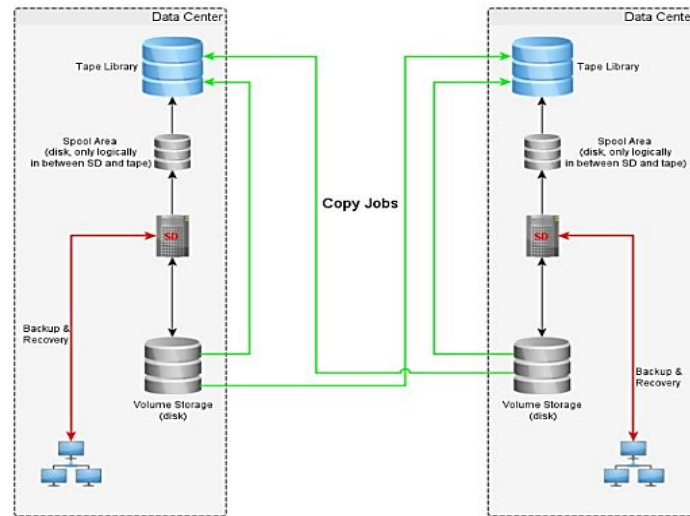
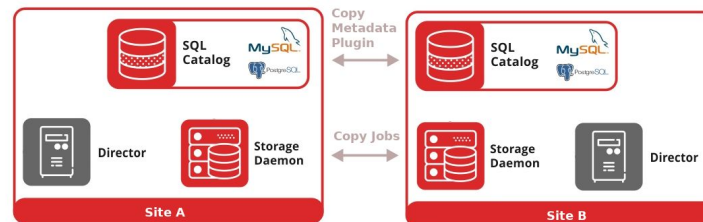
- **Virtual Full - Todas as Cargas**
- **Transversamento de Firewalls e NAT**
- **MIBs para todos os componentes**
- 30 Anos Retrocompatibilidade de Backups
- Remoção de Dados Específicos - LGPD
- Compressão Apenas do Tráfego de Rede
- Job de Cópia e Migração (Replicação do Backup)
- Limite de Banda
- Sem Vazamento de Memória
- Reciclagem Automática de Volumes
- Compatível com Estratégia GFS e outras
- Multiplexação e Paralelismo

# Alta Disponibilidade

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- Cluster de Catálogo, Réplica das Configurações
- Job de Cópia com Réplica de Metadados ou DRBD





Alcatel-Lucent



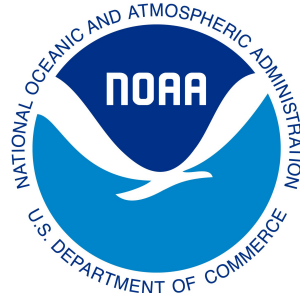
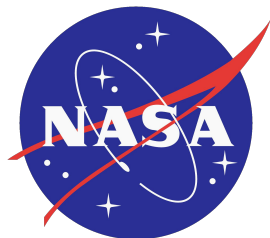
SIEMENS



Volkswagen







WARNER BROS.



Alcatel-Lucent



University of Colorado



BAYLOR  
UNIVERSITY





Hisense



StanleyBlack&Decker



TERESINA SHOPPING



TRTs x12



TREs x02



MPEs x02



CÂMARA MUNICIPAL DE CAMPINAS



DUFY



PUC RIO



Rio Energy

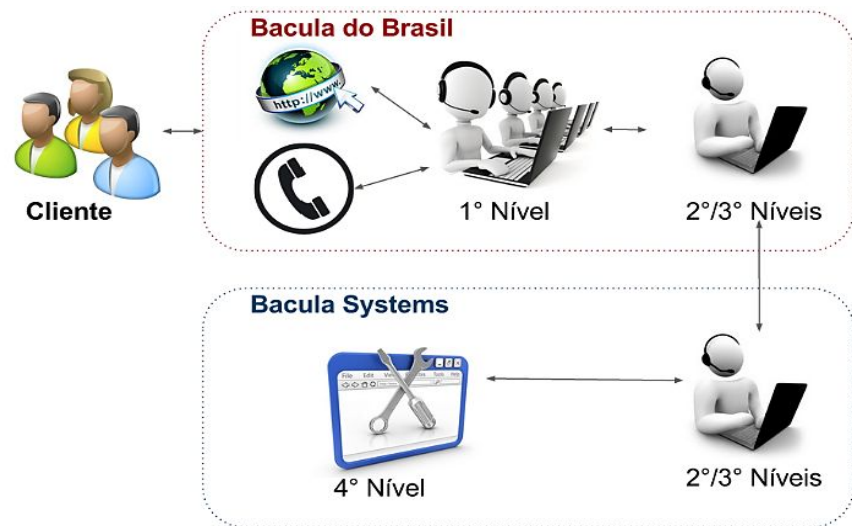
OABRJ

# Serviços Incluídos

**BACULA**  
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- Sizing, Arquitetura & Políticas
- Implantação presencial/remota
- Treinamento in-company e certificação



- Suporte técnico 24x7 com até duas horas de atendimento da **Bacula Brasil e América Latina**
- **Treinamento avançado no centro de treinamento (Flórida e Europa)**
- Atualizações de todos os componentes do Bacula Enterprise
- Repositório online exclusivo com pacotes de instalação de todos os SOs suportados

## Até 77% de economia

- Especialistas em solução de backup
- Modelo simplificado de tarifação
- Estrutura enxuta



## 1. Quantidade Clientes de Backup (VMs, Servidores, Containers etc.)

- Faixas flexíveis (1-20; 21-50; 51-200; 201-500; 501-2000; 2001-5000 etc.)

## 2. Quantidade de Plugins

- Os plugins tem uso ilimitado
- Preço fixo

## 1. Subscrição

- Paga-se o mesmo valor de contratação e renovação das licenças e suporte todos os anos

## 2. Licença Perpétua

- Investimento inicial maior
- Uso permanente das versões baixadas
- Renovações anuais (opcionais - garantia) apenas 20% do preço inicial

# Referências



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