BOCADA.

Release Notes

Contents

Version 21.3.09

September 9, 2021

The following features and enhancements are now available with the release of Bocada 21.3.09. This version is a Major Release and will be supported in accordance with the [Support Terms](#).

New Features

NetBackup RBAC Support
Added support for NetBackup RBAC (Roll Based Access Control) to better support secure data collection via the NetBackup API. Bocada data collection can be configured for NetBackup 8.3 and later to leverage an API key rather than username and password for enhanced security protocols.

Enhancements

Rubrik 6.0 Support
Updated the Rubrik plugin to be compatible with newly released Rubrik 6.0.

Report Actions and Server Property Improvements
Improved workflows and streamlined functionality around data collection configuration and report actions.

Version 21.2.8
August 11, 2021

The following features and enhancements were made available with the release of Bocada 21.2.8. This version is a Minor Release and will be supported in accordance with the Support Terms.

New Features

Redstor
Added support for Redstor backup monitoring, including backup job activity reporting as well as backup-restore failure alerting. Additionally, automated tenant discovery to identify all MSP tenants supported by Redstor.

Consecutive Failures Client Analysis
Enabled display of all targets for each client. This includes displaying lines for trend history of both successful and failed targets.

Enhancements

Custom SQL Reporting Anchored on Backup Day
Allow customers to create custom reports based on the backup day rather than the midnight following a backup.

Server Property Configuration
Improved data collection configuration for storage & backup reporting on the following backup products: NetBackup, NetApp, Networker, Data Protector.

Commvault Error Code Mapping
Improved categorization and identification of Commvault error codes by mapping codes in Bocada to what is reported in the Commvault UI console.

Rubrik REST API Update
Upgraded Rubrik plugin to be compatible with version 5.2.x.

NetBackup
Added support for NetBackup 9.1, featuring improved storage collection reporting.

Version 21.2.7

The following features and enhancements were made available with the release of Bocada 21.2.7. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

Azure SQL Transaction Log Backups
Added reporting for Azure SQL Transaction Log backups, providing visibility into backup performance metrics not currently visible via the Azure Portal.

ServiceNow Integration with OAuth 2.0
Integration with ServiceNow REST APIs using OAuth 2.0 is now available to automate ticketing generation and management.

HPE StoreOnce Gen 4
Added storage capacity and utilization reporting for Gen 4 versions of HPE StoreOnce, consolidating all StoreOnce reporting regardless of StoreOnce generation.

Enhancements

Veeam Expiration and Retention
Improved retention and expiration data for Veeam backups, replications, and backup copies, including long term retention using GFS.

Commvault Copy Job Recognition
Improved copy job recognition to better distinguish and isolate copy jobs from other backup job types for reporting and ticketing.

Improved Job Trends Report Performance
Improved performance of the Job Trends, Consecutive Failures, and Failure Trends reports which now run on the scale of 10x faster.

Improved Actions & Export Menus
Consolidated Action and Export menus and improved the styling to provide a simpler, more intuitive workflow.

FIPS Compliance for PDF Reports Exports
Built FIPS compliance into the PDF exported reports capability.

Version 21.2.6
June 09, 2021

The following features and enhancements were made available with the release of Bocada 21.2.6. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

NetApp SnapCenter
Added reporting for NetApp SnapCenter backups of resources including database instances, Microsoft SQL Server availability groups, Oracle databases, Oracle RAC databases, Windows file systems, a group of custom applications, VMs, and datastores.

Azure Active Directory
Added support for running Bocada and communicating with Azure SQL databases with Azure Active Directory (AAD) users.

Enhancements

Email Support for Mimecast or any SMTP using STARTTLS
Added checkbox option in Bocada email configuration settings to use STARTTLS email protocol. Note that STARTTLS is not compatible with FIPS. SSL or default connectivity should be used instead.

Alerts & Ticketing
Updated alerting and ticketing to allow more precise, targeted criteria to trigger ticket generation. For example, tickets can now be generated based on specific error codes or messages in addition to existing criteria like consecutive failed attempts, groups or resources, or job types.

Charting Export & Email
Updated the chart export and email functionality to ensure that charts preserve their improved look and feel when being distributed outside of the Bocada application.

NetBackup
Added support for NetBackup 8.3.

The following features and enhancements were made available with the release of Bocada 21.2.5. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

Azure SQL PaaS Database Reporting
Added reporting for backups of SQL PaaS Azure including Azure SQL Database and Azure Managed Instance Databases.

Specialized Encryption
Added the ability to use a specific encryption key for all passwords stored within the Bocada database. The key used can be changed at any time, at which all passwords will be re-encrypted.

Enhancements

Acronis Cyber Cloud
Automated Acronis Cyber Cloud tenant discovery and creation within the Bocada Application. This new feature identifies all MSP tenants withing the Acronis account and mirrors the existing tenant infrastructure within the Bocada application to streamline customer reporting.

NetBackup - IPV6
Added support for data collection with NetBackup configured for IPV6.

Executive Summary
Target Days column added that sums the number of targets that ran on each of the days over the time.

Performance
Improved speed and performance throughout the Bocada application.

The following features and enhancements were made available with the release of Bocada 21.2.4. This version is a Major Release and will be supported in accordance with the [Support Terms](#).

New Features

BMC Helix (Remedy) Ticketing Integration
Added functionality to use criteria-based rules to automate Helix ticket creation. Tickets are dynamically updated if multiple failures occur in the same object, eliminating redundant tickets. The Incident History Report can also be used to identify ticket status and any changes made to tickets in Helix, including assignment, state, urgency, severity, resolution, and other attributes.

Enhancements

NetBackup Auto Image Replication (AIR)
Improved identification and categorization of NetBackup (AIR) jobs so replications can better be identified and tracked through the lifecycle of the data.

Veeam Service Provider Console (VSPC)
Improved byte count details for each VM backup including VM size, bytes backed up as well as compression and deduplication statistics when data is available in VSPC for the restore points.

Veeam Backup & Replication
Implemented various improvements to data and reporting, including:
- Added data to track Veeam backup retentions and expirations
- Updated the Veeam plugin to better support changes made in Veeam 11

Commvault Reporting
Implemented various improvements to data and reporting, including:
- Added "Agent Type" to the Bocada job group field
- Added data to the Bocada job group field where previously it was blank, including Agent Type, policy, and other information about the backup job.
- Improved VM identification for Hypervisor backups
- Added information about SQL Transaction Log backups to the Bocada level field

Cohesity Reporting
Implemented various improvements to data and reporting, including:
- Added support for collection against Cohesity nodes running in Azure Cloud
- Improved error mapping to specific error codes within Bocada so selective errors can be ignored or amplified
- Improved reporting of Cloud Archive jobs in the Bocada level field

Version 21.1.3
March 10, 2021

The following features and enhancements were made available with the release of Bocada 21.1.3. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

Zerto
Added Zerto replication data collection and reporting. This includes historical success and failure performance metrics.

CMDB Ingest and Asset
Users can now query and ingest data from any CMDB inventory list or system with an ODBC connection, allowing for queries from simple CSV files to complex cloud ITSM systems. The inventoried data is then automatically compared against backup data in Bocada to highlight:
- Data for clients found in the CMDB but not reported in Bocada, exposing unprotected resources.
- Data for clients reported in Bocada but not found in the CMDB, exposing potential gaps or holes in the CMDB.
- Data for clients found in both sources, enabling management, and tracking of data protection across enterprise environments.

AWS RDS
Added support for running the Bocada database on AWS RDS for SQL server, increasing cloud deployment flexibility.

Azure SQL Managed Instance
Added support for running the Bocada database on Azure SQL managed instances, increasing cloud deployment flexibility.

Enhancements

Azure Backup
Updated the Azure Cloud Recovery plugin to enter and collect data from the Azure subscription level rather than the Recovery Services Vault. This simplifies configuring data collection for Azure Backup and enhances the inventory data set used to identify Azure unprotected assets.

Details about the changes and behavior after upgrade to Bocada 21.1.3 can be found in the Bocada Knowledge Base: https://bocada-support.force.com/s/article/Q-A-for-Azure-Cloud-Recovery-plugin-change-on-Bocada-21-1-3-and-later-versions

Custom SQL Report Criteria

Added '$' variable support to simplify using criteria with Custom SQL reports. For example, to include the Backup Server criterion in a Bocada Custom SQL report:

```
SELECT * FROM servers
WHERE serverfqname in ($Servers)
```

Backup Trends Details

Added metrics of total change in data backed up over an entire date range to augment the change per time unit (day, week, or month).

Storage Trends Details

Added summary of change in data usage over the entire report date range to augment the change per time unit (day, week, or month).

User Experience Improvements

All Bocada reports now feature the action panel in the center of their Bocada dashboard. Further, all action icons are now fully updated.
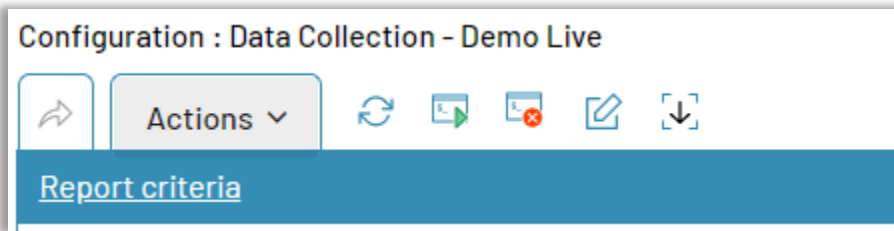
Version 21.1.2
February 10, 2021

The following features and enhancements were made available with the release of Bocada 21.1.2. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

ConnectWise Ticketing Integration
Added functionality to use criteria-based rules to automate ConnectWise ticket creation. Tickets are dynamically updated if multiple failures occur in the same object, eliminating redundant tickets. The Incident History Report can also be used to identify ticket status and any changes made to tickets in ConnectWise, including assignment, state, urgency, severity, resolution, and other attributes.

Acronis Cyber Cloud
Added data collection and reporting for Acronis Cyber Cloud, a tool used by Managed Service Providers (MSPs) to manage backups for their end customers.

Enhancements

Backup Trends Details
Added change in data backed up by the day, week, or month depending on date grouping selected.

Storage Trends Details
Added change in data usage by the day, week, or month depending on date grouping selected.

Backup Clients Criteria
Improved performance to reduce loading time for report criteria and advanced criteria controls.

Version 21.1.1
January 13, 2021

The following features and enhancements were made available with the release of Bocada 21.1.1. This version is a Major Release and will be supported in accordance with the [Support Terms](#).

New Features

Veeam Service Provider Console
Added data collection and reporting for Veeam Service Provider Console (VSPC), a tool used by Managed Service Providers (MSPs) to manage Veeam backups for their end customers. When adding a Veeam Service Provider Console to Bocada, an MSP can enable automated, centralized backup reporting and monitoring at the customer level, mirroring the existing tenant infrastructure.

Jira Ticketing Integration
Added functionality to use criteria-based rules to automate Jira ticket creation. Incidents are dynamically updated if multiple failures occur in the same object, eliminating redundant tickets. The Incident History Report can also be used to identify ticket status and any changes made to tickets in Jira, including assignment, state, urgency, severity, resolution, and other attributes.

Enhancements

Improved Dynamic Charting
Improved charting look and feel, as well as usability, with increased interactivity. This release includes improved charting for not yet updated reports, including Storage Trends, all Data Domain reports (Utilization, Utilization Trends, and MTree Trends), all StoreOnce reports, and the Dashboard.

Criteria Builder
Continued user experience improvements by rolling out the new criteria builder across the Job Trends, Consecutive Failure, and Failure Trends reports.

Veeam Backup & Replication
Added capability to capture additional backup and restore job types such as Guest File Restores.

Commvault
Added specific categorization for index restore jobs to allow for exclusion, if desired.

The following features and enhancements were made available with the release of Bocada 20.3.12. This version is a Minor Release and will be supported in accordance with the Support Terms.

New Features

Micro Focus Service Manager Ticketing Integration
Added functionality to generate incidents in Service Manager using criteria-based automation. Incidents are dynamically updated if multiple failures occur in the same object, removing the need for multiple tickets. The Incident History report can also be used to identify ticket status and any changes made to tickets in Server Manager, including assignment, state, urgency, severity, resolution, and other attributes.

Data Domain Appliance Utilization
Added a bar chart to highlight Data Domain storage usage including total capacity and utilization for each specified appliance, including a drill-down with details such as percent used and cleanable space.
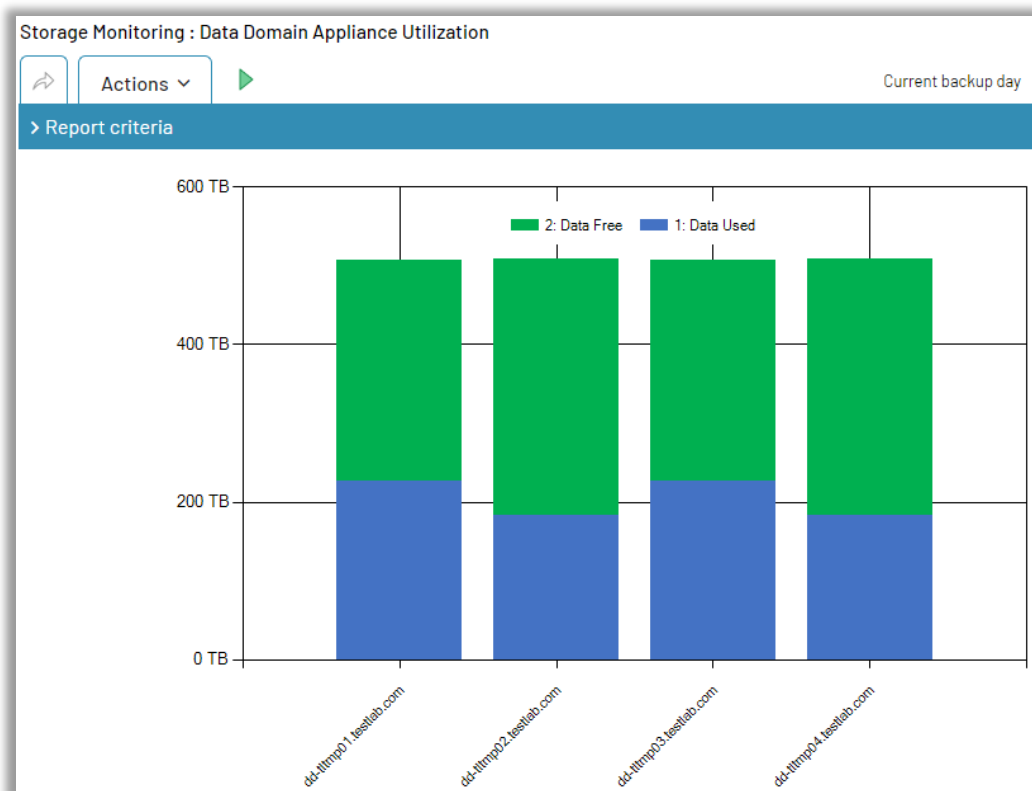
Data Domain Appliance Utilization

Appliance	⬥ Pct. Used	Pct. Free	Pct. Cleanable	Capacity (TB)	Used (TB)	Free (TB)	Cleanable (TB)
dd-tltmp03.testlab.com (11/22/2020)	44.69	55.31	3.56	507.4966	226.7970	280.6996	18.0696
dd-tltmp01.testlab.com (11/22/2020)	44.68	55.32	3.52	507.3341	226.7015	280.6326	17.8478
dd-tltmp02.testlab.com (11/22/2020)	36.21	63.79	2.85	507.9202	183.9392	323.9811	14.4776
dd-tltmp04.testlab.com (11/22/2020)	36.19	63.81	2.88	507.9202	183.8352	324.0851	14.6330

Data Domain Utilization Details

Enhancements

Improved Dynamic Charting
Greatly improved look and feel of reports that use charts as well as added increased interactivity. This release contains new charts for Backup Activity related reporting including Backup Health, Backup Health Trends, Backup Trends, Backup Duration Trends and Restore Health. More charts throughout the platform will be updated in subsequent releases.
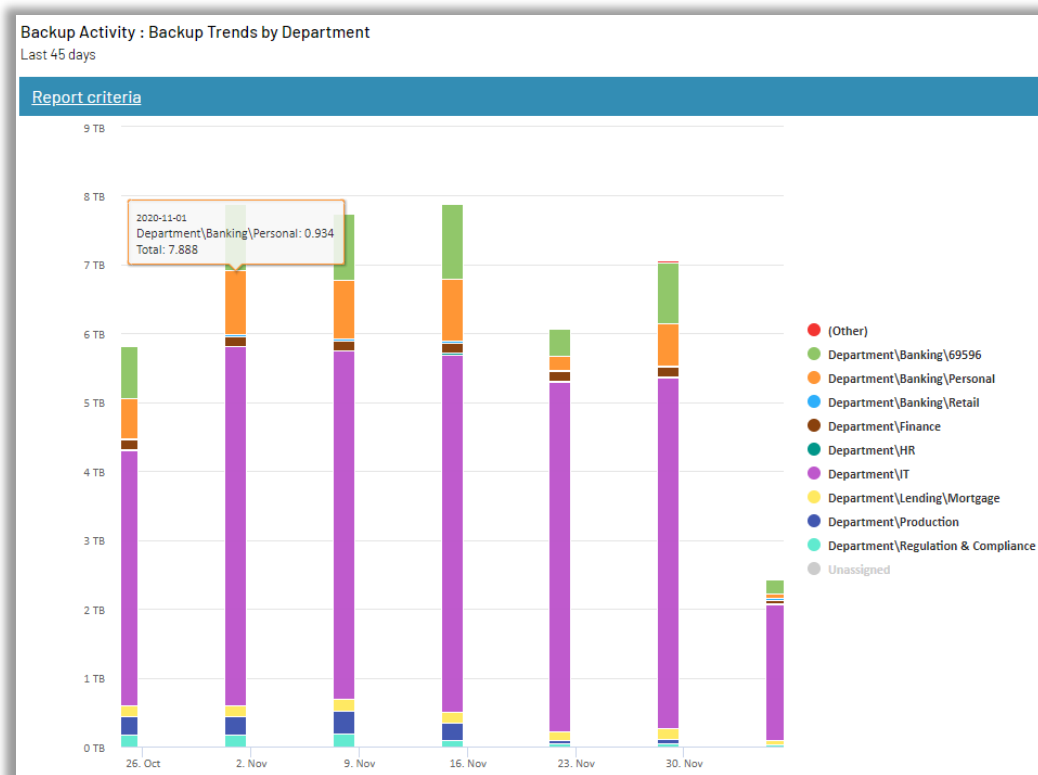
Backup Trends

Backup Health Trends
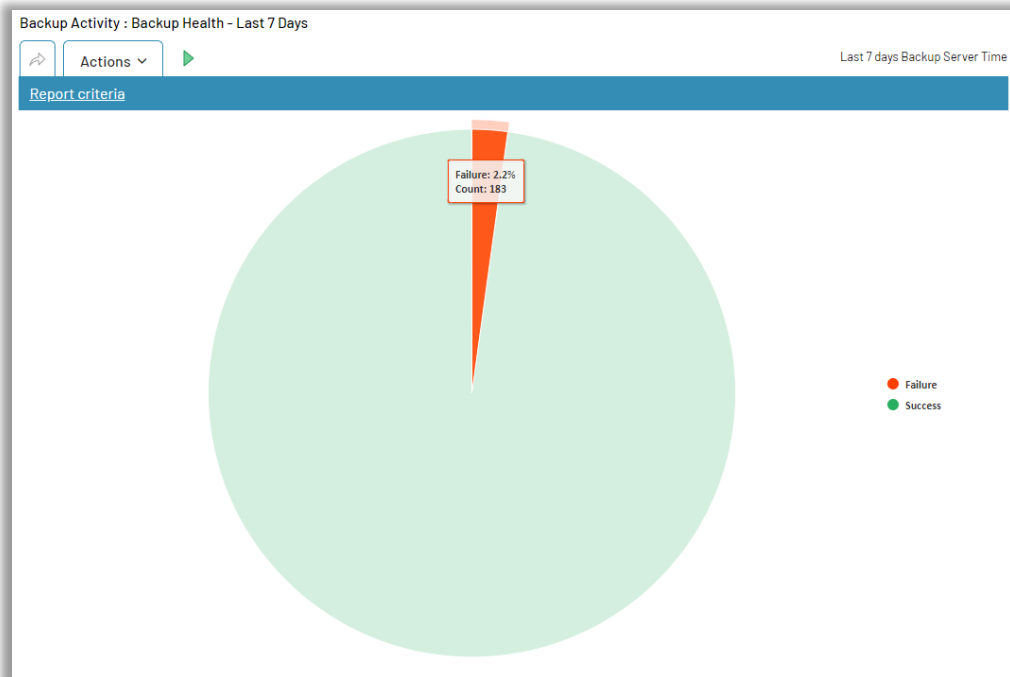
Backup Health

Backup Client Classification for Endpoints
Added the ability to identify clients as endpoints.

ServiceNow Incidents Column Added to Reports
A column has been added to several reports that shows ServiceNow identifiers in plain text format. This allows exported report to show the TT Number and/or the TT Link.

Version 20.3.11
November 19, 2020

The following features and enhancements were made available with the release of Bocada 20.3.11. This version is a Minor Release and will be supported in accordance with the Support Terms.

New Features

Dynamic Report Distribution (Email Blocs)
Added ability to send a single report to multiple audiences with content customized by audience. By inserting a dynamic module or "email bloc" within the report, senders can leverage a single report configuration. Each email bloc is set to show information that is only relevant to users or audiences assigned to unique zones (e.g., MSP customer, geography, application, business unit, etc.). Upon sending the report, recipients will receive a report featuring data associated only with their zone.

Email blocs streamlines the report creation and configuration process, enabling the development of a single report template that can be leveraged across users, independent of their permissions access.

Enhancements

Exported and Emailed Reports
Improved look and feel of inline and attached HTML exports.

AWS and Azure Protection Analysis Reports
Added columns for "Last Inventoried Days" and "Days Unprotected" to help filter out resources that are no longer present in AWS or Azure and better identify and highlight active, unprotected cloud resources.

The following features and enhancements were made available with the release of Bocada 20.3.10. This version is a Major Release and will be supported in accordance with the Support Terms.

New Features
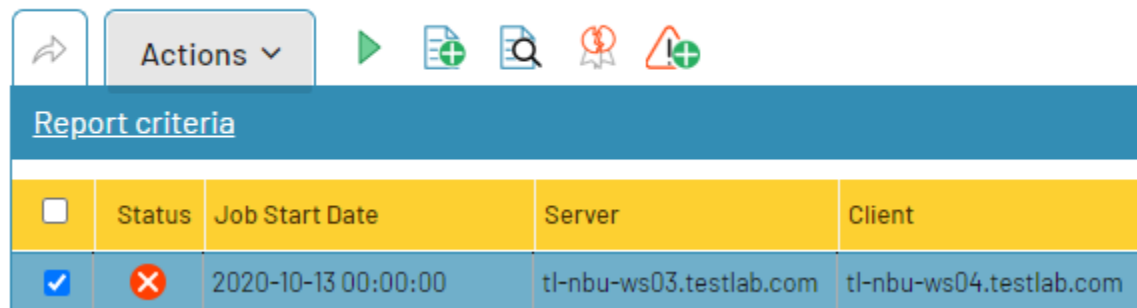
Veeam for Office 365 Reporting
Added reporting for Veeam for Office 365 backups including data about the Office 365 Organization, users, and their resources (mailbox, OneDrive, and site), and media destination type.

Enhancements

User Experience Improvements
Updated report action icons and placement for Job Activity, Backup Failures, Restore Activity, Byte Variance, the Saved Reports view, and several other reports.

Druva Phoenix
Improved Druva Phoenix reporting to collect and report on additional data points including specific error codes, messages, description, and solution steps recommended by Druva.

NetWorker Backup Data Collection
Enhanced data collection process to better support large scale NetWorker server implementations.

Scheduled Actions
Added ability to manually run scheduled Bocada actions on demand to verify configuration of automated processes such as newly created backup failure alerts.

Version 20.2.9

September 10, 2020

The following features and enhancements were made available with the release of Bocada 20.2.9. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

Druva inSync Endpoint Reporting
Added reporting for Druva inSync endpoint backups, including user devices, Gmail, Google Drive, Exchange Online and OneDrive.

Enhancements

User Experience Improvements
Updated the look and feel for the server properties dialog box when adding or editing backup server properties.

Druva Phoenix
Improved Druva Phoenix reporting to collect and report on additional data points including byte counts and file counts.

Bocada Application Server
Added support for running multiple Bocada Application Servers in parallel on a single Bocada database.

Version 20.2.8
August 13, 2020

The following features and enhancements were made available with the release of Bocada 20.2.8. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).
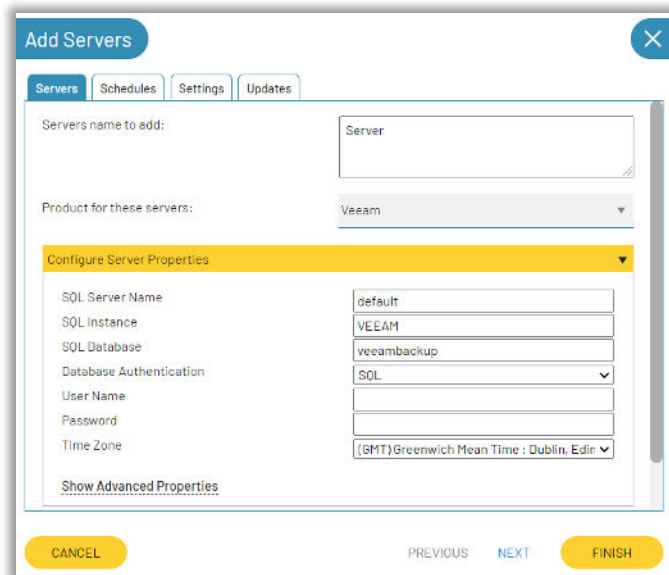
New Features

HPE StoreOnce Reporting
Added storage capacity and utilization reporting for StoreOnce appliances including support for Gen3 single and multi-node devices.

Enhancements

CMDB Functionality
Added ability to manually map CMDB clients that have backups to Bocada clients. Added capability to mark specific clients as "disregarded" so they do not appear in reports when they are known exceptions.

Enhancements to Icon Mouseovers
Enhanced job details available in backup status icon mouseovers, including byte count, number of represented jobs, and any associated job errors.

Executive Summary Report
Added the ability to filter by Backup Product in the report criteria.

Installer/upgrade
Removed unnecessary warning prompt (e.g., Cancel, Retry, or Ignore) to streamline the process.

Improved Application Performance
Streamlined SQL report queries, SQL processes, and automated reporting schedules, reducing stress on the system and improving overall application performance.

Job Trends, Consecutive Failures, & Failure Trends
Added the ability to assign a custom backup status icon to a set of backup errors. Allows for differentiation from Bocada's default red, yellow, and green standards. The default custom icon's color is blue.

Time Zones
Converted date and time data to the Global Reporting Time Zone to clarify the date and time at which events occurred in the Rules Audit and Incident History (e.g., ticketing) reports.

Version 20.2.7
July 8, 2020

The following features and enhancements were made available with the release of Bocada 20.2.7. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features & Enhancements

Azure Cloud Data Collection
Added a new method to collect data from Azure Cloud tenants that:
- Streamlines configuration, leveraging Resource Groups and Recovery Services Vaults rather than Storage Accounts
- Adds reporting for Azure Storage Backups (Azure File share)
- Enhances job message detail
- Enhances visibility into job type
- Adds visibility into "Files and Folders" protected to cloud from on-prem Azure Backup Server (MABS)

Asset Protection Reports
AWS, Azure, and VMware Protection Analysis reports have been split into three distinct reports to segment *Unprotected*, *Protected*, and *All* assets, enabling one-click identification of protected versus unprotected resources.

VMware VM Mapping for Inventory Protection Analysis
Improved the matching algorithm to identify protected / unprotected VMware inventory.

Data Collection Alerting
Released option to be alerted only when collection has failed *and* data has not been collected, accounting for cases where failure may be expected to reduce failure noise.

Version 20.2.6
June 10, 2020

The following features and enhancements were made available with the release of Bocada 20.2.6. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features & Enhancements

ServiceNow Incident Integration
Added capability to include backup job information in the *Work Notes* section of incidents created and updated by Bocada. Any Bocada data associated with the failure can be included, including policy, schedule, backup level, job duration, job group, backup job ID, and more.

Backup Activity Reports
For Bocada-generated service tickets pushed to ITSM tools, a link will be assigned to the listed backup failure within Bocada to take users directly to the ticket within the system, optimizing ticket management.

CMDB Inventory Assessment
Added new columns to the CMDB Inventory Assessment Reports, including customer/account and secondary CI names, to pull and display incremental data from CMDBs. Additionally, existing report column names were improved for greater clarity.

Executive Summary Report
New columns have been added to the Executive Summary report including file count and count of total jobs during the specified time range.

AWS Snapshot Report
Added a summation of the *Capacity* column to show relative usage by AWS VM Instance or Region.

Data Protector
Added information to restore jobs, including byte count and restored file details.

Azure Cloud Storage
Improved the accuracy of the Storage Clients report by detailing data allocated for Azure VM backups.

The following features and enhancements were made available with the release of Bocada 20.2.5. This version was a Major Release and will be supported in accordance with the [Support Terms](#).

New Features

Azure Protection Analysis Report
Added new report to highlight the entire Azure VM inventory, with and without recent snapshot protection, automating the identification of potentially unprotected Azure resources.

AWS Backup: FSx
Expanded reporting for AWS manual and automated snapshot protection to include Amazon FSx and storage utilization of FSx snapshots.

Enhancements

ServiceNow Incident Integration
Improved multiple aspects of the automated incident creation functionality and overall process visibility, including: the addition of enhanced incident data with standard Bocada reports, enhanced visibility of deleted incidents, and general improvements to the user experience.

CMDB Inventory Assessment
Improved reporting to better distinguish between Bocada client data and CMDB CI (Configuration Item) data to identify data protection gaps more easily.

Data Protector
Implemented various improvements, including data collection performance, failure detection, policy (Data Protector specification) information, and restore reporting.

The following features and enhancements were made available with the release of Bocada 20.1.4. This version was a Minor Release and will be supported in accordance with the [Support Terms](#).

New Features

Executive Summary: Backup Server and Backup Client Level Reporting
Expanded executive reporting options within the Executive Summary report by adding capability to show the high-level backup statistics at the backup server and backup client levels. This report previously only supported viewing data by zone.

AWS Protection Analysis Report
Added new report to highlight the entire AWS inventory with and without recent snapshot protection, automating the identification of potentially unprotected AWS resources.

Microsoft SQL
Added media destination for each database backup to data mining and reporting, available in the *Media Destination* field.

Enhancements

AWS Backup
Improved data collection and report visibility for easier EC2 Instance name and ID identification. Previously, name and ID were affixed to the client's name. The separation of these components allows for cleaner visibility.

Bytes Protected in Backup Reports
Updated the reports to display an empty value for bytes Protected when the data is unknown. Previously, this was reported as a zero value for some backup products.

CMDB Reports Renamed
Renamed the CMDB focused reports to better encapsulate what the data identifies.

Current Report Name	Report Description	Previous Report Name
Unprotected Assets	Identifies asset data from CMDB that is not identified as protected in Bocada Reporting	CMDB Only
Non-Inventoried Assets	Identifies where Bocada reporting data does not match any assets within the CMDB inventory	Bocada Only
Protected Assets	Identifies the overlap where CMDB assets contain a backup within Bocada Reporting	Bocada & CMDB Overlap

Media Destination in Storage Reports
Renamed *Media Device* to *Media Destination* for clarity of what the data represents.

Avamar

Improved data and reporting by removing the generic string that Avamar appends to the end of client name for VM client replications.

Data Protector

Improved data collection and job failure detection to prevent identification of certain messages as job failures when they were successful:

Error Message	Reason Successful
Could not find related full backup of the object	Full backup was not detected so backup switched from incremental to full.
Clearing Archive flags is not applicable with Volume Shadow Copy backup	Informational message

Version 20.1.3
March 16, 2020

The following features and enhancements were made available with the release of Bocada 20.1.3. This version was a Minor Release and will be supported in accordance with the Support Terms.

New Features

AWS Redshift Snapshot Reporting
Expanded reporting for AWS manual and automated snapshot protection to include Amazon Redshift data warehouse and storage utilization of Redshift snapshots.

NetApp Storage
Expanded NetApp storage reporting, providing visibility into aggregated and replicated volumes as well as insight into data trends, storage utilization, and storage alerting.

Enhancements

UX Improvement: Streamlined Action Row
Continued to improve user experience by creating a new 'Action Row' at the top of reports. Previously, user actions were placed in a panel at the far right of the screen. The commands have been grouped together and conveniently placed closer to the report itself, an update made across over 40 reports. Bocada will continue to roll out this improvement across more reports in subsequent releases.

Old Behavior

Modern Behavior
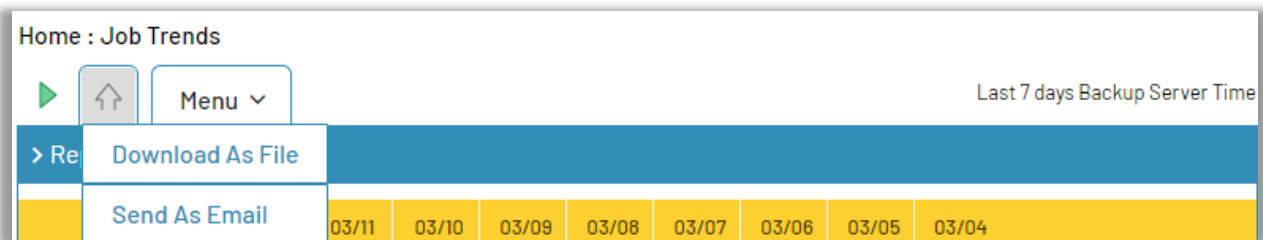
RPO Data Points
Added a *time since last successful backup* data point to the Job Activity, Byte Variance, and Backup Failures reports, providing the time since the last available recovery point.

Microsoft SQL Server Backup
Added reporting of backups configured and performed natively by Microsoft SQL Server, specifically *SQL Server 2005*.

Executive Summary
Added criteria options to include or exclude backup levels (e.g., Full, Incremental, Replication, Restore) allowing for detailed specification of success rates across different categories of backups.

Streamlined Criteria Builder
Continued to improve user experience by rolling out the new criteria builder across 15 additional reports.

Veeam v10 Support
Added support for reporting against Veeam version 10 Backup & Recovery servers.

Microsoft Windows/SQL Server 2019
Added official support for running the Bocada system on Microsoft Windows Server 2019 and Microsoft SQL Server 2019.

The following features and enhancements were made available with the release of Bocada 20.1.2. This version was a Minor Release and will be supported in accordance with the Support Terms.

New Features

LiveVault Enterprise Cloud Backup
Expanded visibility into cloud backup with LiveVault backup and storage reporting, providing visibility and insight into backup status, storage utilization and trends, consumption forecasting, and capacity alerting.

ServiceNow Incident Integration
Expanded capabilities to allow automated population of any incident field present in the ServiceNow instance, including backup error messages, assignment groups, affected assets and other information to further automate the ticket management workflow.

Enhancements

Commvault Client Computer Group Support
Added *Commvault Client Computer Group* to the Bocada data field, "Job Group" to better identify jobs in reports and enhance automation when assigning client to zones via rules.

Commvault Storage Policy Support
Added Commvault *Storage Policy Name* to the Bocada data field, "Job Group" to better identify jobs in reports and enhance automation when assigning client to zones via rules.

Avamar Policy Name Support
Added Avamar *Policy Name* to the Bocada data field, "Job Group" to better identify jobs in reports and enhance automation when assigning clients to zones via rules.

Avamar Contact and Zoning with Contact Rules
Avamar Contact information is now collected with backup metadata and presented in backup and client reports alongside jobs. Additionally, the contact filter in Bocada Rules enables clients to be assigned to zones based on names or partial names of contacts.

Streamlined Criteria Builder
Continued to improve user experience by rolling out the new criteria builder in an additional 23 reports.

Regional Date Settings for Trends Reports
Added capability to view the Job Trends, Consecutive Failures, and Failure Trends reports as DD/MM in addition to the default MM/DD format.

Scheduled Report Email

Added the capability to specify an email subject and message text for reports scheduled for automated email distribution.

Microsoft SQL Server Backup

Added visibility into each file backed up during the database backup by splitting out each file into separate jobs, as reported in MSSQL.

Failure Trends

Improved the report by ignoring no attempts on current day when considering failure. Because the day is typically not complete, this previously introduced unwanted noise.

Version 20.1.1
January 9, 2020

The following features and enhancements were made available with the release of Bocada 20.1.1. This version was a Major Release and will be supported in accordance with the [Support Terms](#).

New Features

Backup Byte Variance Report
Added a report to highlight when bytes backed up by a job are outliers. This is configurable by percentage of bytes over or under the norm, calculation window, or other attributes.

Enhancements

Exported Report Criteria Options
Added the option to *exclude* report criteria from reports that are exported as a one-time email or on a schedule.

Avamar Backup Data Collection Bytes
Added support for "Bytes Protected" to Avamar backup data collection. This field enables reporting on the size of the resources under protection and is often used by MSPs for customer billing models.

<div align="right">

Version 19.7.12
December 11, 2019

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The following features and enhancements were made available with the release of Bocada 19.7.12

New Features

NetWorker Storage Reporting
Added reporting of NetWorker storage providing visibility and insight into data trends, storage forecasting, and storage alerting.

Druva Phoenix Reporting
Updated the Druva Phoenix collection to use the recently released REST API. This provides simpler, more reliable, and more supportable data collection from the Druva Phoenix platform.

Enhancements

Storage Servers Report
Added sever group criteria to allow reporting on server groupings previously configured within the Bocada application.

Data Collection Concurrency
Added the ability to control data collection concurrency globally for each data collection server as well as each update type (e.g., backup, storage, or policy). This provides a simpler way to manage resources on each data collection server and ensure that critical updates are performed ahead of less critical ones.

Streamlined Criteria Builder for Executive Summary
Improved workflow for criteria selection in Executive Summary report.

Media Data Collection: Removed
Removed media data collection and associated reports. This collected and aggregated data on tape mounts and dismounts for backup and was deprecated in Bocada 19.6.9. This is separate from storage collection and reporting.

The following features and enhancements were made available with the release of Bocada 19.7.11

New Features

CPM (N2WS Backup and Recovery) Reporting
Expanded visibility into data protection within AWS to include resources protected by CPM (Cloud Protection Manager), including Amazon EC2, Amazon EBS, Amazon RDS, Amazon Redshift, Amazon Aurora, and Amazon DynamoDB.

Microsoft SQL Server Backup Reporting
Added reporting of backups configured and performed natively by Microsoft SQL Server.

Veeam Storage Reporting
Added reporting of Veeam attached storage providing visibility and insights with data trends, storage forecasting, and storage alerting.

Data Domain File Age and Size Report
Added a Data Domain report that shows files on the appliance broken out by age or size. The file age view identifies space that can potentially be reclaimed to prevent overutilization with expired data. The file size perspective identifies large, potentially non-critical backups that can be expired to provide more room for more critical backups.

Enhancements

NetApp
Improved reporting for the latest versions of NetApp, providing clearer visibility into the volume mirrors and overall protection of clustered ONTAP systems.

Simplified Navigation
Simplified the general navigation section within Bocada providing simpler recognition and discovery of reports, functionality and clearer configuration and management workflows.

Streamlined Criteria Builder for Backup Activity
Improved workflow for criteria selection in Job Activity report for Backup Activity.

Automated Upgrade and Installer Redesign
Redesigned the Bocada Installer to automate upgrades and simplify clean installs with a single unified approach.

The following features and enhancements were made available with the release of Bocada 19.7.10

New Features

Data Domain Mtree Reporting
Added graphical and tabular views into Data Domain reporting to display Pre-Compression, Post-Compression, and Compression Ratios.

Mtree reports can be displayed by Data Domain appliance and Mtree along with other criteria and highlight trends over days, weeks, or months providing visibility into Data Domain usage and compression efficiency.

Data Domain Mtree Trends

         Bocada Release Notes
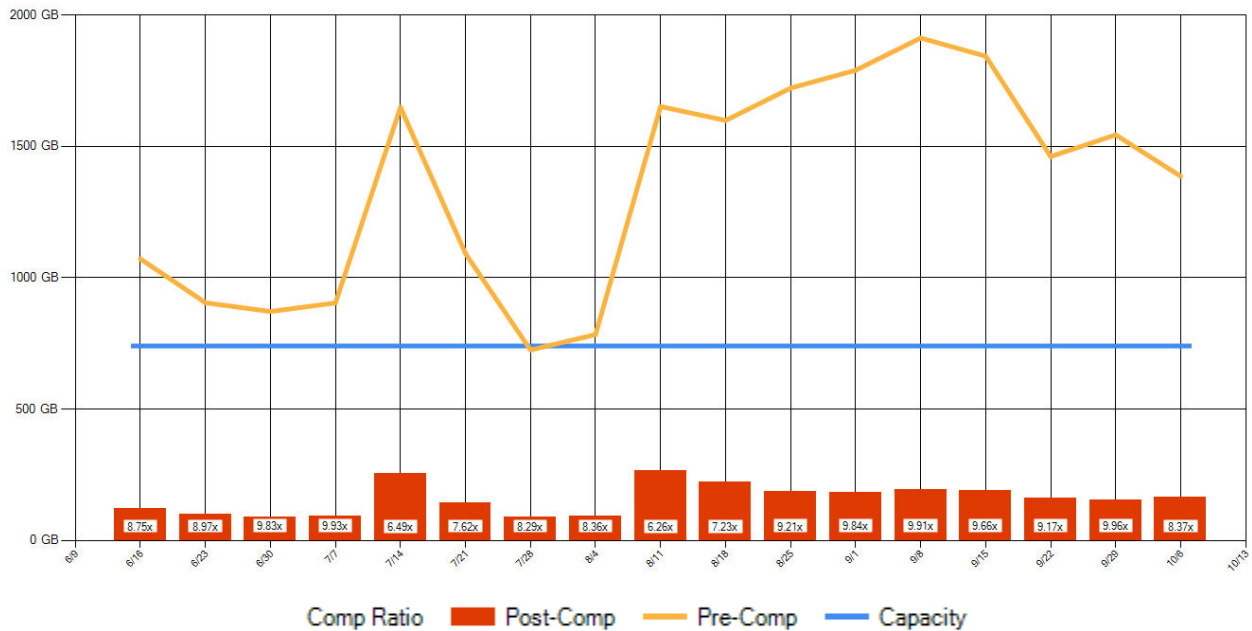
Data Domain Mtree Trends (Tabular)

The tabular data can be viewed from several perspectives including lowest compression ratio Mtrees and largest Mtrees.

> **> Report criteria**

Server	Mtree	Data Type	2019/10/07	2019/10/08	⬍ 2019/10/09
⌄ Data Type: Comp Ratio [22]					
tl-ddve-03.testlab.com	/data/col1/rman-us02-ddve03	Comp Ratio	3.48	3.33	3.68
tl-ddve-03.testlab.com	/data/col1/tl-nsr-us03.testlab.com	Comp Ratio	4.45	4.45	4.45
tl-ddve-03.testlab.com	/data/col1/cohc01-ddve03	Comp Ratio	5.94	5.98	5.98
tl-ddve-03.testlab.com	/data/col1/TSM-share-ddve-03	Comp Ratio	7.3	7.3	7.3
tl-ddve-03.testlab.com	/data/col1/dpws04-ddve03	Comp Ratio	5.3	6.3	9.3
tl-ddve-04.testlab.com	/data/col1/nbu-ws03-REP-ddve03-to-ddve04	Comp Ratio	12.58	14.49	12.71
tl-ddve-03.testlab.com	/data/col1/nbu-ws03-ddve03	Comp Ratio	19.33	24.39	19.49

> **> Report criteria**

Server	Mtree	Data Type	2019/10/07	2019/10/08	⬍ 2019/10/09
⌄ Data Type: Post-Comp [20]					
tl-ddve-03.testlab.com	/data/col1/cohc01-ddve03	Post-Comp	52.008	53.023	53.881
tl-ddve-03.testlab.com	/data/col1/dpws04-ddve03	Post-Comp	80.878	81.122	41.611
tl-ddve-04.testlab.com	/data/col1/comvws02-ddve04	Post-Comp	17.238	17.238	17.238
tl-ddve-03.testlab.com	/data/col1/TSM-share-ddve-03	Post-Comp	16.051	16.051	16.051
tl-ddve-04.testlab.com	/data/col1/veeam-vemws01-ddve04	Post-Comp	12.519	11.778	11.901
tl-ddve-03.testlab.com	/data/col1/rman-us02-ddve03	Post-Comp	5.005	6.311	7.404
tl-ddve-04.testlab.com	/data/col1/hpdp-dpws04-ddve04-rep	Post-Comp	5.697	5.697	5.697

Spectrum Protect Contacts and Zoning with Contact Rules

Spectrum Protect Contact (i.e., data owner) information is now collected with backup metadata and presented in backup and client reports alongside jobs. Additionally, new contact filters in Bocada Rules enable clients to be assigned to zones based on names or partial names of contacts.

Enhancements

NetBackup Data Collection with REST API

NetBackup backup metadata can now be collected via the REST API for NetBackup 8.1.1, simplifying data collection configuration for NetBackup Master servers.

Tabular Report Filtering Persistence

Tabular report filtering is now saved along with report criteria, grouping, and sorting. Tabular filters are configured on the bottom left of tabular reports and make it possible to filter on more comprehensive combinations of column and row values.

The following features and enhancements were made available with the release of Bocada 19.6.9:

New Features

Avamar Storage Reporting
Added reporting for Avamar to provide insight into storage utilization and differentiation between bytes scanned (protected) and bytes retained. This data differentiation provides improved accuracy and simplicity for billing and chargebacks.

Enhancements

Saved Reports View Improvements
Streamlined the use and management of saved reports by focusing the data, simplifying the presentation, and adding criteria for filtering functionality.

Data Domain
- Improved visibility into Mtree data.
- Further automated configuration of data collection with removal of the PuTTY path server property.

Additional Product Notes

Media Data Collection: Deprecated
Media data collection will be removed from Bocada reporting in a future release. This collection method pulls and aggregates data on tape mounts and dismounts for backup and is separate from Storage (Occupancy) collection and reporting.

Drive Utilization Report: Deprecated
Drive Utilization is the only report that leverages the Media Data Collection and will also be removed in a future release.

Version 19.6.8
August 28, 2019

The following features and enhancements were made available with the release of Bocada 19.6.8:

New Features

ServiceNow Ticketing Integration
Added functionality to generate incidents in ServiceNow through automated failure recognition based on criteria chosen by administrators. Additionally, we have released a new report, called Incident History, which keeps up to date with any changes made through the ServiceNow interface, including assignment, state, urgency, severity, resolution, and other attributes.

Storage Utilization Forecasting
Added a report that uses machine learning to predict future storage utilization based on historical data.

Storage Spike Alerting
Added alerting to notify when storage utilization surpasses a specified threshold or spikes in utilization surpass a defined percentage over average.

CMDB Clients Zoning
Added automation to assign assets pulled from CMDB instances to Bocada Zones for simplified management of multi-tenant organizations and environments.

Automated Collection of Log and Capture data
Added automation for collection of logs and capture data so that a user may download log and capture data via the web browser and standard Bocada application.

Enhancements

Data Collection
Enhanced data collection to utilize PuTTY (plink) for connection to Unix master servers, now available for all supported versions of NetBackup. This addition automates the configuration of the Bocada plugin and expedites successful collection when adding a new server. As of this release installation of the NetBackup Remote Admin Consoles (Legacy Windows and Java) is no longer required.

Data Protector
- Improved retention values in Policy reports to reflect user-designated retention schedule rather than default set by backup application.
- Improved accuracy of the target/drive reporting in Policy reports.

Veeam
- Improved reporting where replication and copy jobs were previously reported as unknown.
- Improved byte mapping for Bytes Protected and Bytes Backed Up relative to Total Size and Data Read, respectively, in Veeam.

The following features and enhancements were made available with the release of Bocada 19.6.7:

New Features

User Experience Improvements
Bocada is making a large investment in its user experience throughout 2019. This release includes:

- A new look and feel to tabular reports throughout the application frame in Bocada 19.6.7:

New Look and Feel: 19.6.7

Previous Look and Feel: 19.6.6

Enhancements

NetBackup Data Collection
- Added data collection through WinRM for Windows master servers to replace the previous reliance on the NetBackup Java Remote Admin Console. This addition automates the configuration of the Bocada plugin and expedites successful collection when adding a new server. A similar method of collection for Unix master servers through PuTTy is currently in development and will be available with our next release.
- Added capability to connect with a username and private key rather than username and password.
- Improved accuracy of storage and capacity data.

AWS Reporting
Added reporting for EC2 instances and EBS volumes when they do not have any associated snapshots or protection, providing enhanced visibility into the AWS environment.

Data Protector
Added capability to connect with cell managers to collect data with a username and private key rather than username and password.

Oracle RMAN
Extended capability for reporting on multiple catalogs with unique logins.

Veeam
Added data points for bytes backed up, bytes protected, and job duration among others.

The following features and enhancements were made available with the release of Bocada 19.6.6:

New Features

AWS Backup Reporting
Added reporting for the recently released AWS Backup product. AWS Backup orchestrates centralized management and automation of backups across AWS services. The updated Bocada plugin supports all services available through AWS Backup including EBS volumes, RDS databases, DynamoDB tables, EFS file systems, and AWS Storage Gateway volumes.

Azure Storage Reporting
Added storage reporting for Azure providing insight into Azure storage utilization to assist in managing resources and costs.

User Experience Improvements
Bocada is making a large investment in its user experience throughout 2019. We have made substantive improvements to the following:

- A new Application Frame including the top bar and left navigation panel.
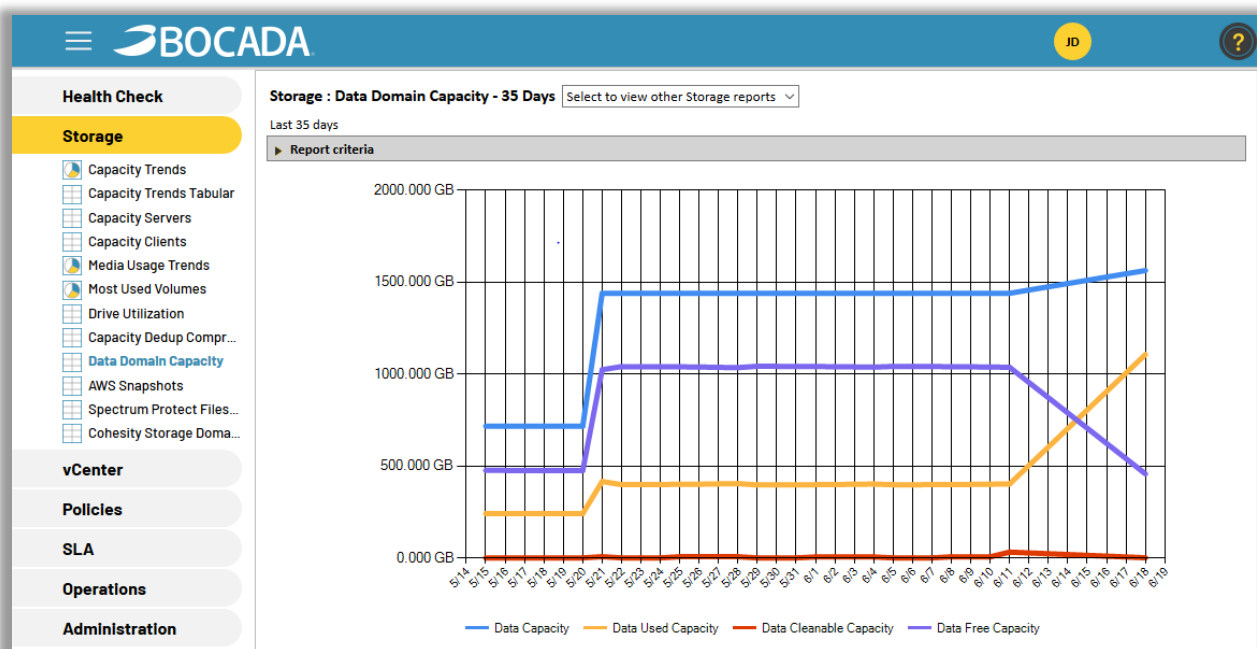
Example of the New Application Frame

Installer Enhancements
Upgrade of the Bocada application is now fully automated with a one-click experience using previously configured settings.

Backup Client Version
The backup agent version and platform (OS) have been added to the backup clients view for NetBackup and Spectrum Protect backup clients. This provides a quick comparison of client version versus backup server version enabling targeted client version updates.

New Support Portal Launch
This month we re-launched our support portal to provide better access to documentation and self-serve materials via a new interface with improved searchability. The new portal can be reached through the support page on the main Bocada website, or directly at https://bocada-support.force.com.

Enhancements

Backup Clients Report
Several changes have been made to the Backup Clients report to enhance performance and scalability.

NetWorker
Updates to the jobquery collection method, including:

- Adding support for NetWorker version 8.2
- Adding the capability to show failed *pseudo_saveset* target backups
- Improving performance and scalability of backup updates
- Cleaning target name displayed for RMAN database targets

Data Protector
- Added capability to use private keys when collecting data from cell managers
- Clarified plugin properties to correct call out of SFTP connection rather than SSH

NetBackup
- Flexibility added to use different collection methods for different collection types to enable more efficient collection of data
- Improved pruning of collection data on the Bocada Data Collection server to prevent excessive disk usage

The following features and enhancements were made available with the release of Bocada 19.5:

New Features

AWS DynamoDB Snapshot Reporting
Added reporting for AWS manual and automated snapshot protection of DynamoDB tables. Also added reporting on the storage utilization of Dynamo DB table snapshots.

Installer Enhancements
When upgrading a Bocada DCS from version 19.4, uninstallation is not required, and the previously entered settings will persist for simple click-through.

When upgrading the Application Web Server from version 19.3 or 19.4, and the upgrade will proceed using persisted settings.

User Experience Improvements
Bocada is making a large investment in its user experience throughout 2019. We have made substantive improvements to the following:

- A new Date-Range Picker in the Capacity Servers and Capacity Clients reports

Enhancements

Backup Activity Reports
Added job message error messaging to the Backup Activity and Failures report for export. This capability (enabled through the criteria) provides the final 2048 characters of job messages that are associated with errors. This feature provides data in an exported CSV file that can be fed to automation tools to find the root causes of failures.

NetWorker
- Updated to ignore job data for pseudo_saveset backup targets. The pseudo_saveset is a metadata anchor saveset used to register important parameters concerning the workflow of client jobs and impacts a variety of features includes the immediate cloning of individual savesets. It is now automatically generated at the start of the backup as an indicator of the list of savesets configured to start for the client.
- Updated RMAN target names to set to Saveset Name, an improvement over the previous "NetWorker Module for Databases and Applications" naming convention.
- Changed the byte count from zero to negative one when the byte count is indeterminable from the raw data source to signify *unknown* in Bocada reports.

Version 19.4

The following features and enhancements were made available with the release of Bocada 19.4:

New Features

AWS Storage Reporting
Added storage reporting for AWS native snapshot protection. Currently supported AWS services include EBS volume snapshots and RDS database instances across instance types and availability zones.

ServiceNow Integration for CMDB Management
Added functionality to query and compare data from ServiceNow CMDB and backup environment status configured with Bocada reporting. Included are views that highlight:
- Data for clients found in the CMDB but not reported in Bocada, exposing unprotected resources
- Data for clients reported in Bocada but not found in the CMDB, exposing potentials gaps or holes in the ServiceNow CMDB
- Data for clients found in both sources, enabling management, and tracking of data protection across enterprise environments.

Installer Enhancements
Additions made to the installer to persist the settings used during installation. This feature will be leveraged in future releases to streamline the upgrade process and will be noticed during installation of the Bocada Application Server when upgrading from Bocada 19.3 to 19.4.

User Experience Improvements
Bocada is making a large investment in its user experience throughout 2019. In this release a few of those changes will be visible for the first time. We have made substantive improvements to the following:

- Criteria Panel for the Data Collection report

Our goal is a simpler, more streamlined, and intuitive interface using modern day user interface styles and patterns. Look forward to continued upgrades and improvements from release to release.

Enhancements

Azure Cloud
Added internationalization support on date and time setting to support collection feature on data collection servers.
- Improvements to failure recognition for errors: ANR0428W, ANR046I, and ANR0430I
- Improvements to RMAN backup failure recognition

The following features and enhancements were made available with the release of Bocada 19.3:

New Features

User Experience Improvements

Bocada is making a large investment in its user experience throughout 2019. In this release a few of those changes will be visible for the first time. We have made substantive improvements to the following:

- Data Collection "Run Manual Update" dialog
- "Add Annotations" dialog
- Criteria Panel for Backup Servers and Backup Server Groups reports

Our goal is a simpler, more streamlined, and intuitive interface using modern day user interface styles and patterns. Look forward to continued upgrades and improvements from release to release.

AWS RDS Reporting

Added reporting for AWS native snapshot protection of RDS database instances across instance types and availability zones.

Annotations Export

Added functionality to export all annotations details as part of the CSV export for Backup Activity, Backup Failures, Restore Activity, and Restore Failure reports. This provides users a simpler way to share the annotations details to assist with auditing and general workflow management.

Enhancements

AWS EC2 (EBS)

- Changed schedule name in backup data for manually created snapshots from *n/a* to *Manual*
- Improvements to in-progress job collection accuracy
- Improvements to data collection messaging when invalid credentials entered

Azure Cloud

- Data collection improvements to account for potential latency with data visibility in Azure Cloud

NetWorker

Improved the accuracy of backup data mined by adding a collection method using jobquery.exe which comes with the NetWorker Extended Client installation. Previous collection using combined partial data sources (MMINFO and the GST database) was less reliable than the new method. This also presents a simpler setup without requiring any access grants to the GST database on the NetWorker server.

For assistance with leveraging this new method of collection, please contact Bocada Support.

Rubrik
- Added reporting for Replication jobs
- Added reporting for Restore jobs
- Improved reporting for On Demand snapshots
- Improved reporting for Archive jobs previously reported as Full backups

Druva Phoenix
General Data collection improvements have been made to address various collection failures and test connection issues.

Spectrum Protect
- Improvements in byte count accuracy for backups with deduplication

Data Domain
Improved reporting for failed replication, including Sync-as-of time:

Successful Replications

Bocada Field	Data Domain Correlation
Job Start Date	Sync-as-of Time
Job Complete Date	Sync-as-of Time
Last Successful Backup Date	Job start date for most recent successful replication

Failed Replications

Bocada Field	Data Domain Correlation
Job Start Date	Default polling time (hourly)
Job Complete Date	Default polling time (hourly)
Last Successful Backup Date	Job start date for most recent successful replication

Bocada Installer
Like the user experience improvements in the application interface, Bocada is focused on improving the experience of our installer and upgrade process. During 19.2 and 19.3 we have laid groundwork to streamline and automate much of this process. Included in that is functionality visible to some users:
- Retention of the Windows Domain user used to run the Bocada Data Domain service.
- Automated installation of some required components, including any upgrades to the Microsoft SQL Native client used for connection to Microsoft SQL Server 2016 and newer.

Version 19.2

The following features and enhancements were made available with the release of Bocada 19.2:

19.2 New Features

AWS EC2 Plugin
Added snapshot reporting for AWS native protection of EC2 instances leveraging Elastic Block Storage (EBS) volume resources.

Automated HTTPS Configuration
Added automated option to configuration the Bocada application to run as HTTPS. More information on certificate configuration can be found in the Bocada Installation Guide.

19.2 Enhancements

Rubrik Data Collection
We have improved data collection and backup job reporting to include:
- Microsoft SQL Server backups reporting
- NAS share backups reporting
- NAS share backup schedules reporting
- VMWare VM reporting improvements
- Backup retention data

Rubrik Capacity and Storage Reporting
Added reporting to provide insight into Rubrik capacity and storage growth.

Enhanced Automated Reporting
Added previous month, week, and day criteria to better automate reporting.

NetBackup Plugin
- Improved handling of SLP replications
- Improved support for data collection of NetBackup 8.1.2 Master servers

Data Domain Plugin
- Addition of last successful backup date, which is used to determine if the replication is in sync
- Improved data collection for Data Domain devices

Spectrum Protect
- Improvements in byte count accuracy for backups with deduplication

Spectrum Protect Plus
- Improvements to policy reporting
Improved accuracy for catalog backup client names

For technical support or if you would like a copy of our standard support agreement, please contact us.

E-mail: support@bocada.com
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Phone: 425-898-2400