# Release Notes

# Contents

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# Version 22.3.09
September 14, 2022

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The following features and enhancements are now available with the release of Bocada 22.3.09. This version is a Major Release and will be supported in accordance with the [Support Terms](#).

## New Features

### Favorite Reports
Added a new mechanism to mark saved reports as "Favorite" so frequently accessed reports can be quickly and easily run from the new Favorites drop down menu bar.  There is also a new "Favorites" view in the "Home" block on the left navigation menu that lists out favorited reports in tabular format.

## Enhancements

### NetBackup
Improved data collection and reporting for NetBackup version 10.0.1 and added support for version 10.1.

### Veeam
Various updates to improve the data reported from Veeam, including an additional data point that pulls the "Reason Failed" from the Veeam database.

### ServiceNow: Description Field Limitations
Added a limitation to prevent the Description field of a ServiceNow incident from growing beyond a manageable character size, especially key when Bocada updates existing tickets with subsequent backup failures. After the limitation is met, Bocada will increment the number of failures within the description.

### Navigation
Left navigation menu group will now auto-collapse when selecting a new group.

### Price Management menu option hidden by default
Price Management option is now hidden by default. This option can be enabled by changing settings.

## Resolved Issues

### NetBackup
Improved data collection to handle new cases from NetBackup version 10.0.0.1 and 10.1.

### vCenter
Released database space usage in vevent table.

# Version 22.2.08
August 10, 2022

The following features and enhancements are now available with the release of Bocada 22.2.08. This version is a Minor Release and will be supported in accordance with the Support Terms.

## New Features

**Spectrum Protect Licensing Report**
Added a new Spectrum Protect Storage Report showing capacity usage in primary pools to anticipate upcoming IBM licensing costs for Spectrum Protect (TSM) deployments.

**Intelligent Identification of Missed Backups**
Consecutive Failures and Job Trends Reports can now show when an expected backup did not run with a blue icon in the job status field. The new blue status icon highlights when a backup job didn't run on a day when it was expected based on the weekly backup history.

**Automatic Zoning on Backup Server Time Zone**
Added capability to automatically create Bocada Zones, and assign backup clients to those Zones, based on a backup server's time zone, providing more automation and flexibility within report criteria.

**Email Reports: Multiple Reports in a Single Attachment**
Added an option to receive multiple reports in a single HTML document attachment.

## Enhancements

**Executive Summary**
Added new column options to the Executive Summary Report, including  % Target Success as well as including/excluding partial successes as successful job runs.

**Veeam**
Improved reports in Veeam for host backup levels *Synthetic Full* and *Copy*.

**Druva Phoenix**
Improved visibility over SQL Servers protection status for those servers within multiple Availability Groups that have the same name, an addition possible with newly released Druva Phoenix API updates.

## Resolved Issues

**Consecutive Failures Report**
Report Criteria Option "Show All Targets for Backup Clients with Consecutive Failures" now shows the intended results.

**Scheduled Emails: Compressed Email Attachments**
Updated the default size to compress attachments from *Always* to *5 GB* and moved menu next to other email controls.

The following features and enhancements were made available with the release of Bocada 22.2.07. This version is a Minor Release and will be supported in accordance with the Support Terms.

## New Features

### Azure App Services
Added support for Azure App Services data collection and backup reporting.

### Azure Cosmos DB
Added support for Azure Cosmos DB data collection and backup reporting.

## Enhancements

### AWS Snapshots Report
- Improved the way snapshot aggregation works through the report criteria selector. This allows for better quantification of storage utilization by snapshots of unknown sizes across different groups like AWS Region, Service, Account, and Resource.
- Introduced manual snapshot grouping to improve report flexibility. Expired and orphaned snapshots can now be more easily identified for cleanup.

### Azure Cloud Backup
Added functionality to collect data from multiple subscriptions within an Azure Tenant. This streamlines data collection from Azure Cloud and gives enterprises the option to automatically scale Bocada as their Azure subscriptions grow.

### Druva Phoenix
Proactively adjusted our data collection protocols to handle recent changes Druva made to its public API endpoints. This adjustment supports new customer regions and a "new staggered deployment model."

### Microsoft SQL Backup
Mapped transaction log backups to the Bocada Level of *Transaction Log* as opposed to its previous mapping to *Other,* allowing them to be uses in report filtering criteria.

### NetWorker
Data Collection optimized for faster collections, especially improving speed for large NetWorker servers.
### Veeam improvements
Added multiple Veeam updates to enhance data precision and accuracy:
- Data on completed backup jobs that are part of running Veeam Job Sessions is now available. Previously these were reported as In Progress until the entire Veeam Job Session completed.
- Added option to automatically map warnings in Veeam to an error so that jobs with warnings can be reported as Partially Successful. Default behavior is that warnings are not reported as errors, enabling backups with warnings to be considered successful.
- Improved Job Error code recognition and categorization

### Rules: Improved Pattern Matching

Improved the pattern matching capability in Rules so that backup clients can be assigned to Bocada zones based on multiple patterns within the same Rule using comma separation. This streamlines the number of rules required to deliver tailored reports for specific data owners and managers.

### Server Decommission

Added an option at the Bocada Server level to disable manual data collection updates. This enables customers to keep all data for a decommissioned backup server in the Bocada history without unintentionally running a manual data collection and impacting reports and licensing.

### Ticketing/Incident Troubleshooting

Added email alerting and reporting for cases where Bocada attempted to create an incident or ticket in an ITSM system but failed. The reporting is available as an additional column in the Job Activity and Backup Failures reports as well as the *Failed Incidents* report in the *Operations --> Advanced Config.* section.

## Resolved Issues

### Consecutive Failures CSV Export

Corrected a duplicative row issue appearing only on Consecutive Failures report CSV exports.

### Edit Servers

Fixed the data collection run issues caused by editing a backup server's connection properties and choosing to perform data collection immediately after finishing the setup wizard.

### License Report

Addressed an issue where the licensed units and total units consumed were not summed properly in the exported PDF or HTML report versions.

### Upgrade Robustness

Fixed upgrade-related issues where corrupted registry entries would cause the upgrade or uninstall to stall or fail.

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# Version 22.2.06
June 8, 2022

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The following features and enhancements were made available with the release of Bocada 22.2.06. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

## Improvements

**Veeam improvements**
Several changes in Veeam Data Collection around Transaction Log backups, Error Code handling, backup level assignments, and backup job success/failure assessment.

**Redstor improvements**
Discover Tenants will now do zones creation and collection filter based on "Selected Tenants" in server properties.

## Resolved Issues

**Networker backup: Time out and performance issues**
Networker backup collection was failing with "Skipping job save job-NNNNNNNN: invalid start date" and time out errors. Also, made performance improvements

# Version 22.2.05
May 11, 2022

The following features and enhancements were made available with the release of Bocada 22.2.05. This version is a Major Release and will be supported in accordance with the [Support Terms](#).

## New Features

**Cherwell Incident Ticketing integration**
Added functionality to use criteria-based rules to automate incident ticket creation in Cherwell. Incident tickets are dynamically updated if multiple failures occur in the same object, eliminating redundant tickets.

**New Asset Inventory reports**
Built four new reports in the Asset Inventory section to replace the existing three reports from the "CMDB" section. These reports highlight the same *Protected*, *Unprotected*, and *Non-Inventoried* assets with additional data points and improved filtering. The fourth report added is an *All Assets* report which provides a view into the entire inventory data set in a single place.

The current set of new reports is phase-1 of three phases, and future releases will also consolidate inventory data from AWS, Azure, VMware, and other sources into these four reports.

## Enhancements

**Storage Alerting**
Added automated alerting to signal storage usage approaching a percentage of total capacity.

**AWS Availability Zone**
Added AWS Availability Zone information to backup job region data when applicable to an AWS Service, e.g.: EC2 instances.

## Resolved Issues
This release resolves customer reported issues. The most critical fixes are documented below.

**Saved Reports**
Enabled renaming of saved reports from the Saved Reports interface.

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# Version 22.1.04
April 15, 2022

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The following features and enhancements were made available with the release of Bocada 22.1.04. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

## New Features

**Dell PowerProtect Data Manager (PPDM)**
Added support for PPDM backup and restore activity reporting. This includes reporting on job activities as well as failure alerting & ticketing.

**Druva Phoenix Oracle Backup Job Reporting**
Added reporting for Oracle database backups using *Phoenix Backup Store (PBS)* process.

**Emailed Reports: Compression of Large Reports**
Added functionality to send reports as a single, compressed zip file when the size exceeds a user-configurable maximum size.

**Emailed Reports: Multiple Report Attachments**
Added functionality to aggregate multiple scheduled reports and send all the reports in a single email as zipped or standalone attachments.

**MSSQL Plugin: Bulk upload SQL Instances using CSV**
Automated adding multiple SQL Server instances to Bocada for data collection via CSV. This enables ingesting multiple SQL Servers with different properties (e.g.: server name, instance name, authentication method and user) into Bocada via one step.

## Enhancements

**Druva Phoenix: SQL Availability Group (AG)**
Improved reporting and visibility by appending the primary server of the AG cluster to the Bocada Client name, which previously contained only the Availability Group Resource Name.

**NetBackup Policy Data Collection: REST API Support**
Added REST API (including RBAC) support to report on the policy configurations.

**Spectrum Protect: Discrete Database Backup Reporting**
Improved database-level reporting by splitting multi-database backups into individual targets, allowing for database specific auditing.

**Ticketing: Added Criteria to Filter by Ticketing Instance**
Added criteria to select specific ticketing system instances in the *Backup Failures* and *Job Activity* reports.

**Commvault: Backup Media Destination Metrics**
Added data collection and reporting for *Media Destination*, *Media Server*, and *Media Library* for each successful Commvault backup.

**vCenter Plugin: Host Clusters Visibility**
Added data collection and reporting for VMware Host Clusters in the VMware Asset Inventory reports.

## Discontinued Features
**Assign Data Domain Function**
This function assigned backup policies to the Data Domain "Media Type" within Bocada for backup products which write backups to Data Domain as a standard file server (e.g.: TSM). Product feedback indicated that this feature is not used.

## Resolved Issues
This release resolves customer reported issues; the most critical fixes are documented below.

**Bocada Installer Fails with Error 0x80070666 (Case 10179)**
This failure occurred when a newer version of the Microsoft C++ redistributable already installed on the system. The updated behavior will be to skip installation of the C++ redistributable when a newer version is detected.

**Data Domain: Collection Shows as Successful Without Data Collected (d547)**
This issue occurred when Data Domain usernames or passwords were invalid or expired. The updated behavior in this release shows the data collection as failed with the appropriate messaging.

# Version 22.1.03
March 10, 2022

The following features and enhancements were made available with the release of Bocada 22.1.03. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

## New Features

**Automatic Zone Assignment Based on CMDB Asset Inventory**
Added automated zoning based on CMDB data for both Bocada and CMDB Asset Inventory client data.

**Druva Phoenix Oracle Backup Job Reporting**
Added reporting for Druva Phoenix *Direct to Cloud* backup of Oracle databases.

**Export Job Details**
Individual job detail data now exportable from the Job Trends, Consecutive Failures, Failure Trends, Job Activity, and Backup Failures reports after clicking on the green, yellow, or red icons.

**Spectrum Protect Storage Pools Report**
New report created for Spectrum Protect (TSM) for Storage Pools related report including Tape Libraries and Stgpools.

## Enhancements

**Bocada Upgrade Configuration**
Added functionality for the Bocada installer to change database or user configuration during an upgrade.

**NetBackup Data Collection**
Added data collection support for NetBackup Linux servers through SSH using the root user and password instead of standard user with sudo.

## Resolved Issues
This release resolves customer reported issues; the most important ones are documented below.

**Spectrum Protect Backup Storm Resolution**
Added more robust handling of some backup session storms. For example, when repeated attempts to communicate with the Spectrum Protect server are denied due to licensing issues.

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# Version 22.1.02
February 9, 2022

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The following features and enhancements were made available with the release of Bocada 22.1.02. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

## New Features

**AWS Backup Auto Zone Assignment**
Built upon existing AWS Role-based data collection to now enable auto-creation and assignment of AWS clients into Bocada zones

## Enhancements

**Commvault**
Added data collection to mine the internal static hostname given to backup clients within Commvault.

**Scheduled Report Management**
Updated the Run Report icon to a Refresh icon to differentiate between refreshing the data in the report and running the Scheduled Report Configuration.

**Performance**
Improvements to report and data collection speeds.

**Redstor**
Added capture & playback, improved collection performance, and improved reporting on some successful backup jobs.

**Price List**
Updated the styling and functionality of the Price List configuration dialog.

## Resolved Issues
This release resolves customer reported issues; the most important ones are documented below.

**Spectrum Protect**
Added more robust handling of client backup session storms for cases, an example being when repeated attempts to communicate with the Spectrum Protect server are denied due to licensing issues.

**Data Protector**
Improved localization support for data collection.

**Orphaned Clients Report**
Removed legacy report in favor of the Backup Clients report which provides a more configurable view of resources that may be orphaned.

# Version 22.1.01
January 12, 2021

The following features and enhancements were made available with the release of Bocada 22.1.01. This version was a Major Release and will be supported in accordance with the Support Terms.

## New Features

### Acronis Cyber Protect
Added support for Acronis Cyber Protect's backup and in progress jobs. This includes reporting on job activity and trends as well as failure alerting & ticketing.

### NetBackup Storage Configurations
Added REST API (including RBAC) support to report on the following storage configurations: disk pools, storage servers, storage units, and cloud-based storage support for Azure.

## Enhancements

### AWS Roles
Added a feature option to enable data collection against AWS spoke accounts when the Role used for authentication does not have permission to collect data against the AWS Hub account.

### Scheduled Report Management
Added report level ownership (Global Default & My Default) to Scheduled Report Management so customers can identify when default reports are scheduled for distribution.

### AD User validation
Added a flexible configuration to skip AD user verification via cross-domain checks to enable successful email distribution of reports.

### Data Collection
Provided a self-service option to remove obsolete Bocada DCS entries to help streamline diagnosis of data collection related problems.

## Resolved Issues
This release resolves customer reported issues; the most important ones are documented below.

### Spectrum Protect (TSM)
- Addressed a storage data collection failure with Error 545: Data source failed: Command is valid, but one or more parameters were not specified correctly ExecuteCommand failed: RC(3) EC(0).
- Fixed an issue with VM backups reporting with an incorrect VM Client name for Mode: DataMover backups

### Azure Cloud Recovery
Fixed the SQL Client name for transaction log backups which were sometimes shown as a GUID string.

**Azure Backup Server (DPM)**
Storage trends chart for DMP 2016 now shows valid data following a successful storage collection.

**Storage Servers Report**
Update report to remove duplicate entries and better focus on storage repository utilization.

# Version 21.3.12

December 8, 2021

The following features and enhancements were made available with the release of Bocada 21.3.12. This version is a Minor Release and will be supported in accordance with the Support Terms.

## New Features

**ServiceNow Incident Auto-Closure**
Added support for native integration with ServiceNow to automatically close opened incidents via rule-based actions. Allows customers to specify open and close states based on default or custom ServiceNow configurations.

**AWS IAM Role Authentication**
Added support to collect data at scale from multiple AWS accounts through IAM Roles. The addition of IAM Role authentication to IAM user authentication allows customers with multiple, and dynamically created AWS accounts to report on all their data through a single Bocada configuration.

## Enhancements

**Veeam**
>Added support for *Veeam Backup for AWS* reporting for AWS EC2 instances protected by Veeam Backup & Replication.

**Commvault**
- Enhanced the identification of unique errors and limited extraneous alerting and ticket generation by improving VM backup error recognition.

**General Reporting**
- Added support to display dates in international formats in the Job Trends, Consecutive Failures, and Failure Trends reports exported or emailed as CSV.
- Improved default sorting behavior in dynamically grouped tabular reports.

## Resolved Issues

This release resolves several customer reported issues; the most important ones are documented below.

**Spectrum Protect (TSM)**
- Fixed the incorrect reporting on backup targets as Restore jobs when they should show up as Backup jobs.

**N2WS**
- Improved data collection to better capture and report on long running jobs

# Version 21.3.11

November 10, 2021

The following features and enhancements were made available with the release of Bocada 21.3.11. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

## Enhancements

**Spectrum Protect (TSM)**
- Improved performance & scalability of the plugin to better support large Spectrum Protect Server deployments.
- Enhanced data integrity by addressing failed VM backups reported as successes and incorrect byte counts reported in certain backup jobs.

**Rubrik RBS Agent Reporting**
Enhanced the Rubrik plugin to report on RBS agent versions, supporting audits requiring file-level backup use-case scenarios.

**Commvault Disaster Recovery**
Enhanced the Commvault plugin to include reporting on disaster recovery backups.

**Zone Creation & Assignment**
Provided a mechanism to automate Zone creation and the assignment of f backup clients to Zones based on a CSV, text, or a similar dataset.

**Protected Asset Reporting**
Updated CMDB Protection analysis reports to exclude vCenter inventory and snapshots when assessing asset protection levels.

**Scheduled Report Management**
Added a column to display time zone to easily correlate the scheduled reports with the correct time zones.

# Version 21.3.10

October 13, 2021

The following features and enhancements were made available with the release of Bocada 21.3.10. This version is a Minor Release and will be supported in accordance with the [Support Terms](#).

## New Features

**ServiceNow Customer Service Management (CSM)**
Added support for ServiceNow Customer Service Management which provides customers with a flexible configuration to create, monitor, and report on CSM cases within the Bocada UI. Also includes an automated journal to record all Bocada-created CSM cases.

**Google Cloud Platform (GCP)**
Added support for Google Cloud Platform backup and storage. This includes reporting on job activities as well as failure alerting & ticketing.

## Enhancements

**AWS Snapshot Groupings**
Enhanced the reporting criteria for the AWS Snapshots Report to allow aggregation by Snapshot, Clients, Servers, Regions and AWS Service Type (EC2, RDS, etc.).

**Improved License Management**
Improved managing license workflows and functionality. UI enhancements also included.

# Version 21.3.09
September 9, 2021

The following features and enhancements were made 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
July 14, 2021

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.

# Version 21.2.5
May 12, 2021

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.

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# Version 21.2.4
April 14, 2021

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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](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.
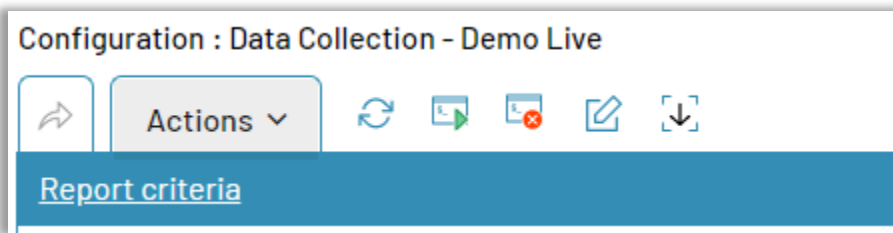
# Version 21.1.2
February 10, 2021

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](#).
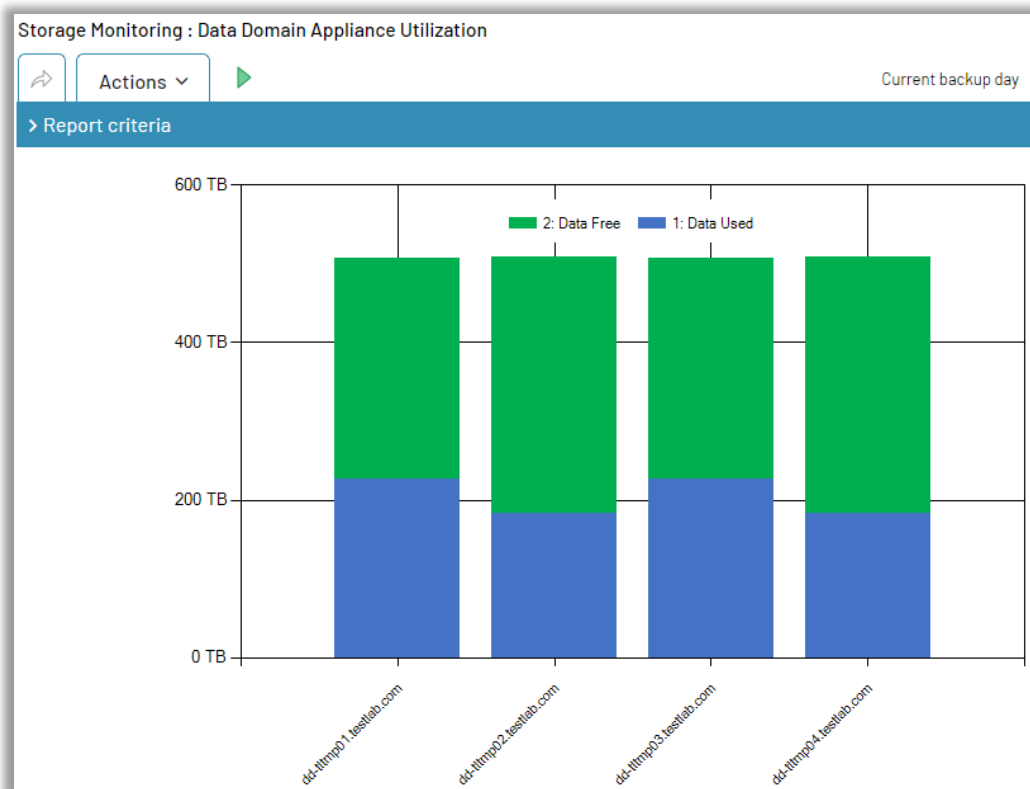
## New Features

**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

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.
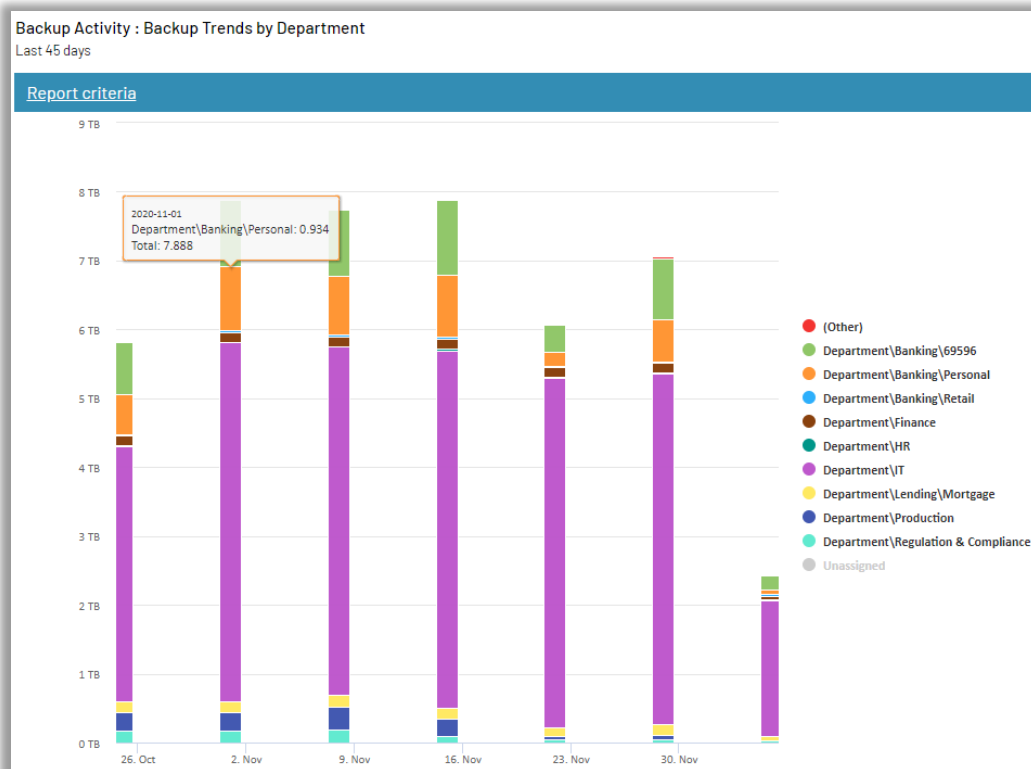


Backup Trends

Backup Health Trends
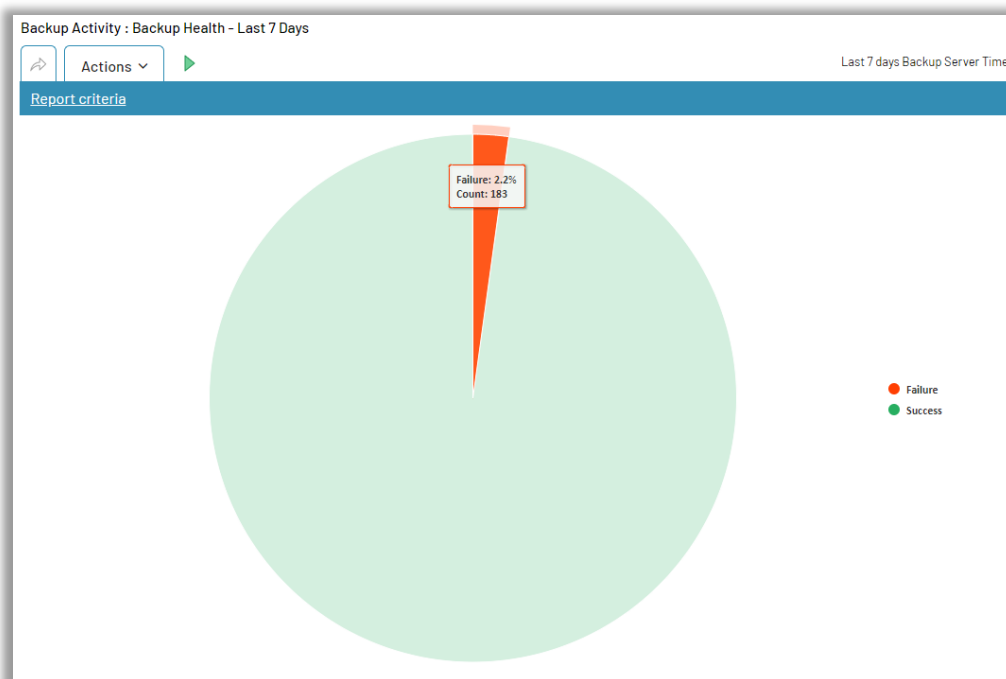


Backup Health

**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.

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.

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.

# Version 20.1.4
April 8, 2020

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 |

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
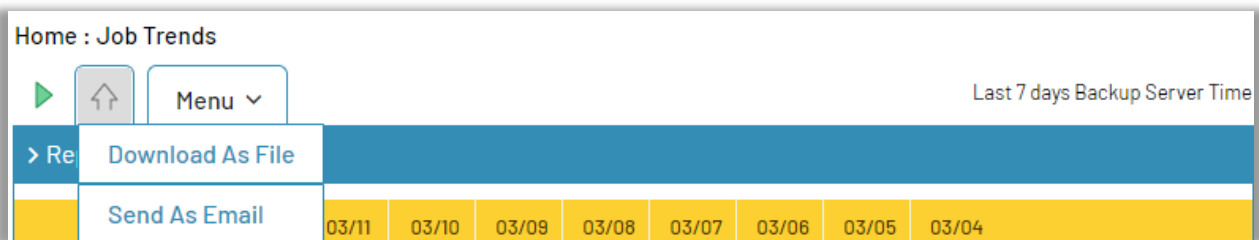


**RPO Data Points**
Added a *time since last successful backup* data point to the Job Activity, Byte Variance, and Backup Failures reports, providing the time since the last available recovery point.

**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.

# Version 20.1.2
February 14, 2020

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.

# Technical Support

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

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**Phone:**       425-898-2400