

# HP INVESTIGATION (DRAGON—DATA RETENTION AND GUARDIAN ONLINE) SOLUTION

DRAGON release 6.3—Multi-Archive Management for  
efficient Data Archiving

Solution brief



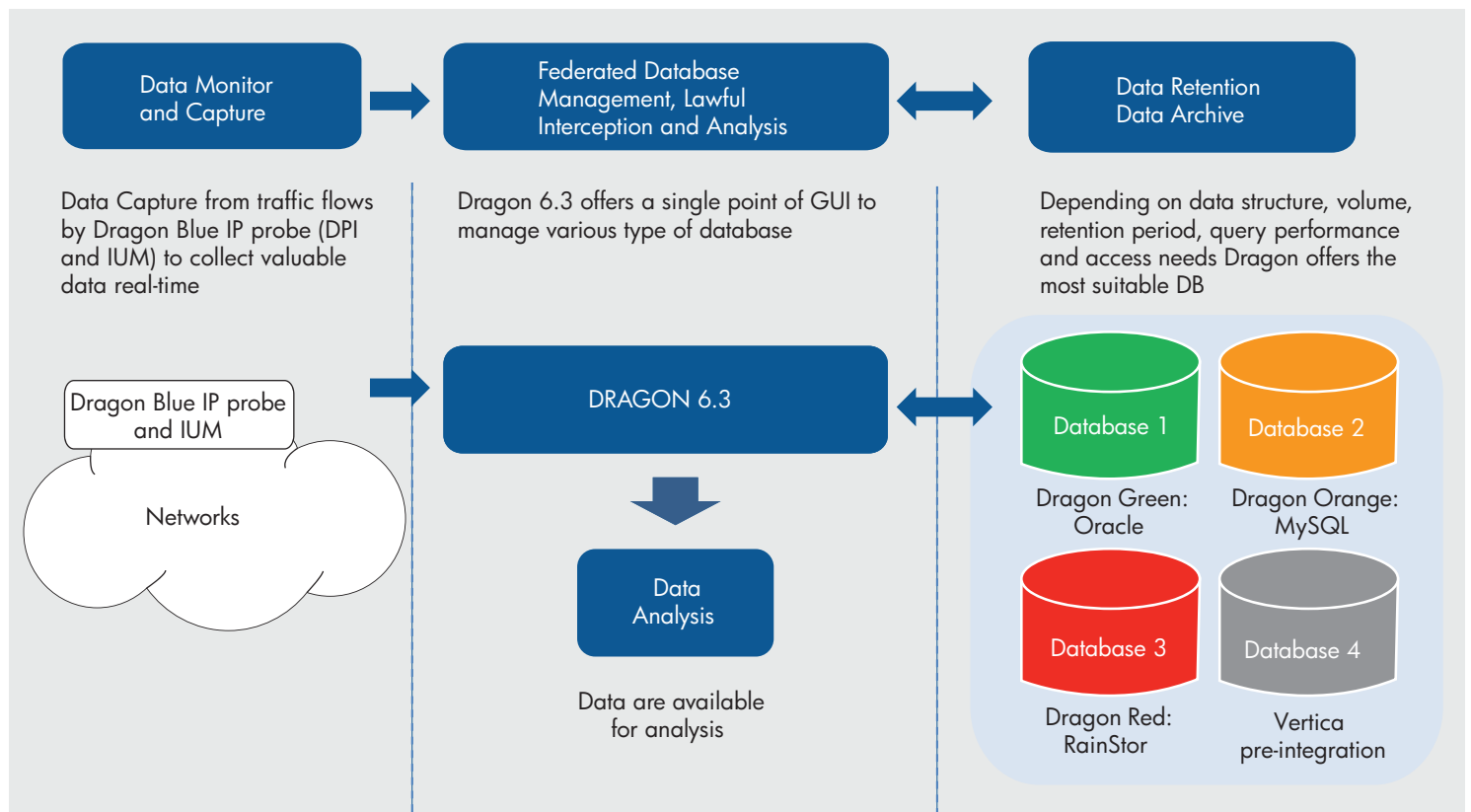
HP Investigation is committed to help companies handle massive data in an efficient, secure, cost effective manner by offering several state-of-art solutions for data archiving, data management and transferring data into information. As information is increasingly important in our daily lives and companies need to capture data from various sources, or from different type of data storages, the need for a solution that can handle different archiving technologies is getting more crucial for heavy-duty data management and data store. Multi-Archive is a collection of databases (DBs) in which data is treated as one entity and viewed through a single user interface offered by DRAGON 6.3 GUI. Using DRAGON 6.3, it is becoming easier to collect and consolidate data from different sources in order to analyze and generate the required information as an outcome. Further enhancements to DRAGON 6.3 are also taking place to accelerate the query speed and performance, to improve the system security, and to enrich DRAGON 6.3 with the capability to extract data from Vertica database, as well as, beyond the existing database technologies that are available in DRAGON.



## Data collection, management, and archiving with DRAGON 6.3

DRAGON manages the end-to-end lifecycle of data through the collection, management, and data archiving processes. See the Figure 1 below which outlines these steps.

**Figure 1:** The end-to-end process for data collection, management and archiving with DRAGON 6.3



## Data collection

Collecting the necessary data in a valuable format and understanding the information sitting deeply insight of data flows is the winner strategy that can be powered by DRAGON Blue IP probe Deep Packet Inspection (DPI and IUM) solution. DRAGON Blue provides the capability of monitoring, extracting, and filtering data directly from network traffic real-time, offering passive probes that generate no overhead on network devices, hence leave no impact on network operation. As different companies have different needs our main focus is the flexibility and the ability to customize DRAGON Blue to monitor exactly the same level of data flow insight and to collect exactly the same data required by our clients.

For more information about DRAGON Blue solution, read the [DRAGON Blue solution brief](#).

## Data management

Data retention or data archiving are not only about having data storage and store data. There are a number of important aspects to be considered, like security, authentication, accessibility, performance, management, and maintenance of databases. Nowadays, in most cases we talk about different database types as companies use various types of databases to store their various types of data. For instance, the client database, or communication activity database, or billing information database could be different entities; however the challenge is to synchronize the data among the databases and to be able to manage them as a single point of management. All these requirements are addressed by the DRAGON 6.3 proving to be the right solution for enterprise data management.

### The new features available in DRAGON 6.3



#### 1. Graphical flow configuration

The DRAGON Graphical Flow configurator offers a simple graphical interface to configure all aspect of data management; like how and which input data have to be loaded onto the archives, the retrieval query to extract the data, the layout and presentation of this data, the retention time, and the brokering query process flow on the Core Module. All these aspects are important elements of everyday work with databases.



#### 2. Multi-Archive Database Management

For data capture, DRAGON 6.3 introduces an additional Federated Server architecture, based on the concept of data source. Federated database is a collection of databases treated as one entity and viewed through a single user interface offered by DRAGON 6.3 GUI. The data source is the only component of new DRAGON Federated Server dependent on the database in use. All Federated Server Chain functionalities are database independent, and use a specific data source when they need to access the databases:

- Query chain (doc generator and query engine)
- The Federated Server Chain is designed to address:
  - Federated archive management
  - Cross Archive Query configuration
  - Query pipeline



#### 3. Real Time Query

For data capture the Real Time Query (RTQ) feature represents a new logic flow for work item request elaboration, in addition to the asynchronous mode. The RTQ feature adds the capability of receiving work item results in a synchronous-like way. In this way DRAGON introduces a new tool to help end users in improved data query performance.



#### 4. Security

DRAGON 6.3 introduces a new pluggable authentication system integrated with Active Directory and JBoss authentication system. This enhancement will delegate authentication but not authorization using a bind process between the authenticated user and an existing DRAGON user to determine his/her permissions.



#### 5. Vertica pre-integration

For data capture the DRAGON 6.3 introduces a pre-integration with Vertica archive. The integration will be limited to the query part that means DRAGON 6.3 is able to read and query data from Vertica database.

## Data archiving

Every day, companies must store and manage a large amount of information, used for purposes ranging from marketing, to billing, to capacity planning, to legal and compliance. The size of data is so large that new prefixes have been invented: peta, exa, and zettabyte. Data is becoming one of the biggest corporate topics—data management is no longer an IT problem but a consideration of corporate strategy.

Moreover, different data need different archive, retrieve, and security capabilities. They can be heterogeneous (a mix of text and multimedia, for instance). Some data need strong security and encryption.

To survive the data explosion means to be able to govern all the different aspects of data explosion that:

- Dramatically reduce available storage
- Use the right archive technology for each data type

- Reduce the system and data center complexity
- Require data reliability on a wide range of devices used in different settings
- Require compliance and secure data management

For more information about DRAGON Large Archive solution, read the [DRAGON Large Archive solution whitepaper: Data explosion challenge.... and how to survive](#)

DRAGON provides the possibility to use the right archive technology per data type to reduce the system size and improve data archive efficiency and realizing cost saving. DRAGON also implements Federated Database Management in order to manage various types of databases at a single point of management screen (DRAGON 6.3 GUI) and to create relations between different database types.

DRAGON offers the right archive technologies as the table shows below, the best fit for all:

DRAGON product name	DRAGON Green	DRAGON Orange	DRAGON Red	Vertica
Database Technology	Oracle	MySQL	RainStor	Vertica
Upload/Query Capabilities	Both upload and query	Query only	Both upload and query	Query only
Data Volume	Large, Medium, or Low	Medium or Low	Large	Large or Medium
Query Response Time	Within 10 seconds	Within 10 seconds	Within 100 seconds	Within 10 seconds
Access Requirements	Deep and complex analysis for 1000 of users	Deep and complex analysis for 10 of users	Easily defined analysis for 100 users	Deep and complex analysis for 1000 of users
Focus	High performance and flexibility	Low TCO	Low TCO	High performance and analytics
Data Compression Factor	2x	2x	9x	6x



## Combination of different DB technologies with DRAGON

It is possible to combine different databases by the DRAGON Multi-Archive capability. One of the scenarios is when the DRAGON Red solution is used for raw data (CDRs, and more) storage, and another database like Vertica is used for analysis purposes.

DRAGON Red uses RainStor DB technologies as Data Store and focusing on the reduction of cost and effort of collecting and storing granular data. Typical usage as operational data store with the following features:

- Fast and efficient ingestion
- Industry-leading compression to reduce data size (to save storage costs)
- Simple management and scalability
- Fast SQL access and export to Enterprise Data Warehouse (EDW)

Vertica is focused on providing fast and agile analysis of data aggregated from RainStor data warehouse with the following features:

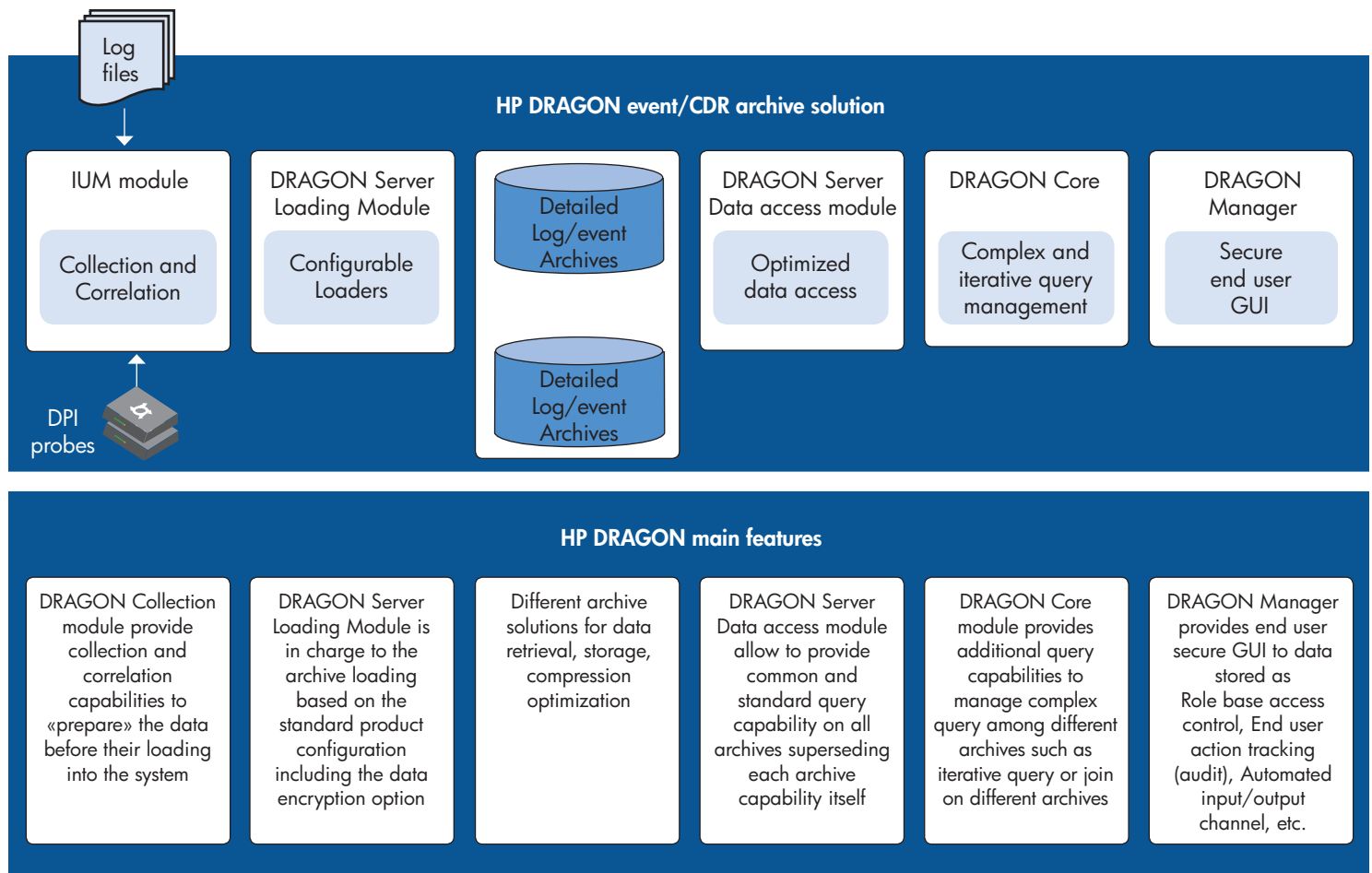
- Advanced and fast analytics
- Simple database design and tuning
- Automated performance optimization

The combination of DRAGON Red and Vertica databases provides comprehensive analytical capabilities for companies and low TCO at the same time.

## Solution Architecture

DRAGON 6.3 solution architecture is described on Figure 2.

Figure 2: DRAGON 6.3 High Level Architecture



## Business benefits

HP DRAGON delivers the multi-dimensional scalability of performance, capacity, and functionality required to fulfill communications data requests. Flexible HP DRAGON supports many business models including mobile virtual network operator (MVNO), hosted multiple operating units, multiple geographies, and others.

### Some of the main benefits of DRAGON:

- Complete solution for integrated Data Collection, Data Retention and Archiving offering highly scalable and flexible solutions to ease access to critical operations data.
- Scalable solution for data archiving with the provision of several types of database, like Oracle, MySQL, RainStor, Vertica, and Sensage, as per data usage requirements to improve TCO.
- Federated database management to treat database as one entity and be viewed through a single user interface offered by DRAGON 6.3 GUI.

### Benefits through integration:

- Supports all common integration standards and technologies including ETSI, CALEA, 3GPP, web services and XML
- Reduces operating cost through a common integration approach for both external and internal systems

### Security:

- Provides comprehensive data security features, including encryption and certificates that protect privacy and integrity
- Includes robust user security mechanisms, such as user access controls, auditing and reporting, and optional integration to external authentication systems
- Enable confidence in communications through secure messaging channels

## HP in the telecommunications industry

HP helps the world's CSPs transform the way they do business—to grow in a fast-changing market, CSPs must meet the huge demand for new services, and streamline internal operations. HP is unmatched in its ability to help CSPs drive transformation: 30+ years of

## HP Services

### HP Solution Lifecycle Services

HP Solution Lifecycle Services for the communications and media industry help you realize the full value of your solutions, from planning and assessment through testing, deployment, operation, and nearly continuous improvement. Each service area leverages proven processes and best practices to balance CAPEX and OPEX and reduce risk, while keeping your projects on time and your operations running smoothly.

HP Services offer a proven way for navigating through your transformational journey:

#### Consulting

HP Solution Consulting Services help define business transformation and translate strategies into actionable solutions.

#### Implementation

HP Solution Implementation Services offer a low risk project lifecycle across design, development, customization, and network and system integration.

#### Management

HP Solutions Management Services increase the operational efficiency of your existing solutions, including reactive, proactive, operational, and enhancement services.

#### Outsourcing

HP Services offer a variety of sourcing options designed to improve business agility while reducing your OPEX; options include IT and infrastructure outsourcing (ITO), application management (AM), and business process outsourcing (BPO).

telecom experience, global IT leadership, expertise in entertainment, and leadership in consumer devices.

HP offers a truly end-to-end portfolio from core network to handheld devices—including a suite of convergent IT and telecom solutions, such as: software (OSS/BSS, SDP, SDM, or cloud); professional services including: business consulting, integration, and managed services/outsourcing; joint go-to-market programs; carrier-grade servers; storage; printers; and tablets and smartphones.

## Contacts and Resources

For more information visit [www.hp.com/go/investigation](http://www.hp.com/go/investigation) or e-mail [investigation@hp.com](mailto:investigation@hp.com).

Achieve the lowest TCO and the highest performance and query capabilities for your Data Warehouse deploying DRAGON 6.3 Multi-Archiving Database Management and Data Archiving solution. Offering end-to-end Data Collection, Data Management and Archiving employing DRAGON 6.3 GUI to maintain, analyze and query database to generate information in the required outcome. Visit: [www.hp.com/go/investigation](http://www.hp.com/go/investigation) to know how.



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