SERVER SYSTEM HEALTH CHECK

CLEARION

Overview

The purpose of server system health checks is to investigate database storage, servers, and server applications to ensure that the data storage and server system for Clearion is configured, maintained and performing at optimum efficiency. Clearion will focus on the following servers:

- SQL Database
- ArcGIS Server

SQL Database Server

Clearion health checks on the database server is focused on these areas:

1. The Esri ArcSDE geodatabase and system repository
2. Server performance
3. Strategic maintenance planning

The ArcSDE system repository is a series of tables and views designed to manage geodatabase functionality. Active geodatabases are continuously inserting, updating and deleting values, rows and items within the repository tables as ArcSDE manages geodatabase functionality. Additionally, the user database tables of actively edited geodatabases are consistently changing over time. Proper maintenance of the ArcSDE repository and geodatabase tables is necessary to ensure peak geodatabase and geodata application performance. Clearion can investigate the ArcSDE system repository and user database tables for current performance inhibitors, and restore premium geodatabase functionality.

The database server can be checked to ensure that the server and server space is configured, allocated and operating at peak functionality. Server and database recovery models can be checked for consistency and completeness.

For both the geodatabase and server, Clearion can investigate currently implemented maintenance strategies, and can provide and implement necessary strategies for maintaining optimal performance.

Timeframe estimation: 12-18 hours, dependent on the magnitude and complexity of system configuration, existing maintenance strategies, if any, and the number and complexity of health concerns, if present. Includes a written summary of findings, recommendations and strategic maintenance implementations.

ArcGIS Server

Clearion health checks on ArcGIS Server is focused on these areas:

1. ArcGIS Server application performance and configuration
2. Esri GIS and geodata services
3. Server performance

The ArcGIS Server application is the core back-end software used to publish GIS web services and geodata services which distribute data to and from Clearion mobile and web applications. The application consists of multiple components, including a series of Windows services that administer the data services and application functionality, data and configuration stores and logging outputs, and a web client to manage configuration and functionality. Proper configuration of the components and web services associated with ArcGIS Server are essential for highest performance data transfer to Clearion web tier applications.

Proper tuning of the server that hosts ArcGIS Server is vitally important for application performance and stability. It's possible with improper server tuning that ArcGIS Server can become poorly performing, unstable, or corrupt, possibly requiring a complete reinstall of the software.

Clearion can perform a comprehensive check of the ArcGIS Server application components, the GIS and geodata services, and server tuning to ensure that the system is operating optimally and without risk of instability or corruption. Clearion can also implement performance best practices for application fine-tuning, and disaster preparedness strategies to secure your ArcGIS Server infrastructure in the event of server or application failure.

Timeframe estimation: 12-18 hours, dependent on the magnitude and complexity of system configuration, existing maintenance strategies, if any, and the number and complexity of health concerns, if present. Includes a written summary of findings, recommendations and strategic best practices and recovery implementations.