Oracle ZFS Services

SERVICE OVERVIEW

The Oracle ZFS Storage Appliance family is Oracle's preferred NAS storage system with unified storage capability for enterprise tier 1 environments. Intelligent Hybrid Storage Pools, along with real-time analytics and easy-to-use administration, deliver economic advantages through agile storage deployment and management.

OnX Oracle Professional Services offers a portfolio of services from installation and configuration assistance, to performance reviews, monitoring and support of Oracle ZFS Storage Appliances. Expedite the successful deployment of your storage technology with Oracle ZFS services from OnX and increase your enterprise NAS performance.

SOLUTION DESCRIPTION

OnX Oracle ZFS Services helps you successfully configure and deploy Oracle ZFS Storage Appliances whether you are integrating them with Oracle engineered systems or enhancing your heterogeneous NAS environment. OnX utilizes delivery best practices for all installation and configuration activities to help avoid disruptions that could cost time, money and business.

OnX Oracle ZFS Services Include:

- **Installation and configuration** – Proven, standardized installation, configuration, and production reviews

- **Best practices and knowledge transfer** for maintaining and optimizing Oracle ZFS Storage Appliances

- **Monitoring and resolution** – 24x7 proactive system monitoring and incident resolution services for storage environments

- **Advanced support** – Technical reviews and advise with certified engineers for optimizing storage infrastructures

OnX's installation and configuration delivers successful system implementations with highly trained engineers and proven, standardized installation methodologies. OnX's engineers apply best practices, tools and technology for all installations.

OnX storage experts audit the installation environment, configure, integrate and test your new Oracle ZFS Storage Appliance before final handover. OnX Oracle ZFS services speeds the time from installation to production and ensures the execution of comprehensive confidence testing.

Key installation and configuration services may include:

- Develop build specification and validation procedures plan
- Document configuration parameters and review against business requirements
- Install and Configure ZFS Storage Appliance per build specification
- Functionality test, per validation procedures plan
- Review installation and configuration and provide final documentation

ORACLE ZFS ADVANCED "BETTER TOGETHER" FEATURES

The application-engineered integrated functions are worthy of special note. They are each accretive in being able to provide operational and financial value and, in simple terms, are possible because the Oracle database and applications are Oracle-storage-aware, and vice versa. While each is a specific capability, they are all part of a fully automated database-to-storage tuning and compression capability:

- **Hybrid Columnar Compression (HCC)** is not new, but is valuable inasmuch as it can dramatically reduce the physical storage capacity requirements for Oracle databases by up to an astounding 50x. This not only saves both CapEx and OpEx, but also speeds database queries.

- **Oracle Intelligent Storage Protocol (OISP)** is a new software facility that provides "metadata hints" from the database to the storage that can eliminate the – often literally hundreds of – hours that users of even "advanced" storage systems spend tuning their storage and databases for optimal performance (Oracle claims an average of 65% reduction is such manual tuning times). Think of this as moving from a synchromeshed stick-shift or sequential manual transmission to the latest 8-speed dual clutch automatic gearbox with F1-style paddle shifters that is simultaneously fully integrated with the engine management system and has knowledge of the upcoming road, traffic, and intended destination.

- **Automatic Data Optimization (ADO)** increases Oracle Database 12c efficiency and performance, by dynamically moving data across different types of storage based on heat maps of data usage patterns, not just by tiering, but also by simultaneously using the HCC compression mentioned above to multiply the benefits. This means different algorithms and degrees of effort, not only for varying types of data but also across data lifecycles. ZFS and Oracle Database 12c can automatically determine which data sets should be compressed for deep archival, and which should be left uncompressed for more frequent accessibility.

RELATED SERVICES

OnX can assist you in any and every phase of project lifecycle. Whether you need help designing, provisioning, integrating, upgrading, or optimizing your infrastructure, we have the skills and expertise to assist. OnX offers a complete portfolio of related services, including assessments, planning and design, implementation, and troubleshooting and support services.

- Database Health Check
- Oracle Database Migration or Upgrade Planning Workshop
- Oracle Database Upgrade Services
- Oracle Database Performance Tuning Services
- Oracle Backup and Recovery Solution Services
- Oracle GoldenGate Services
- Oracle Engineered Systems Services
  - o Exadata Configuration Services
  - o Exadata Migration Services
  - o Exadata Optimization Services
- Application Services
  - o Application Testing and Optimization Services
  - o Application Life Cycle Management Testing-as-a-Service
  - o Enterprise Service Management Assessment

PROJECT MANAGEMENT

OnX includes project management as part of all projects to manage the overall project team, create and maintain the project plan, communicate status on a recurring basis and facilitate escalations as needed. This helps to minimize risks and ensure timely and successful service delivery. Additionally, OnX maintains a knowledgebase of "lessons learned" comprised of feedback from all service deliveries to help prevent unforeseen delays and other impact on the project.

WHY ONX?

- Our proven success delivering ~1,100 projects annually.

- Our experience designing and integrating enterprise data center solutions gives our clients access to skills and expertise beyond their in-house IT teams and traditional resellers.

- OnX's industry certifications across a broad selection of best-in-class IT manufacturers and technologies gives us access to information, tools, techniques, and enablement beyond those available to in-house IT teams.

- We utilize Industry, OEM, and OnX Best Practices and capture and apply lessons learned to reduce client risk.

- OnX methodology and project management applied to all projects.