Vendita Master Automation Sequencer (MAS)

Highlights:

- MAS is an automation engine for systems-level tasks, including maintenance, patches & upgrades.
- MAS natively catalogs & tracks changes, allowing for version control.
- MAS excels at provisioning, featuring capabilities for configuring from bare-metal to a fully operational DB server.
- MAS Solution Pacs deliver pre-built, product-specific automations for DBAs & System Administrators.
- MAS includes a library of basic OS & DB operations & facilitates the development of custom automations.
- MAS automates Oracle-related tasks performed by DBAs associated with Data Pump, RMAN, performance monitoring, tuning & storage management.
- MAS features a lightweight footprint with no client-side agent to install.


The Business Case for MAS

The growing complexity and size of database environments strains IT resources, reducing agility and innovation.

Tight deadlines and budget constraints present challenges for IT managers charged with overseeing massive, sprawling database infrastructures. For teams that support these infrastructures, every day is a struggle to keep up with security, tuning, and backup-related tasks. Professional burn-out is common – zapping productivity, leaving no mental energy for innovation, and preventing organizations from positioning themselves for successful growth and adoption of new technologies.

Transitioning to an infrastructure that leverages automation, standardization and repeatable processes is how successful organizations are overcoming these challenges.

Gone are the days of experiencing deployment delays, complicated provisioning, and pieced-together processes to launch and manage database workloads on-premises or in the cloud. To achieve this setup, though, business must adopt new technologies that harnesses the power of automation and Infrastructure as Code (IaC). Vendita Master Automation Sequencer – MAS – is the asset designed to put this goal within reach.

Historically, automation software that could achieve these results came at a high cost. MAS has changed the game by putting these benefits in reach of organizations, large and small, finally allowing organizations to lower operational costs up to 30% or more¹ without busting software budgets.

¹ Assuming average costs of 50% or more for manual tasks.
MAS – An Introduction
Master Automation Sequencer – MAS - is Vendita’s cross-platform automation software that standardizes, catalogs, and automates the custom operations of an IT environment.

Built on a foundation of Python, PostgreSQL, and Linux, MAS requires no shell programming skills and features a lightweight footprint with no client-side agent.

Instead, MAS runs as a VMware (VM) guest operating system made available through Vendita’s Cloud Delivery System. Accessed through MAS’ iOS interface, installation, setup, roles, and permissions can be easily executed and managed.

MAS delivers immediate automation, provisioning, deployment, and maintenance capabilities, allowing for the most rapid time to value for an organization.

MAS includes pre-built templates for processes, including bare-metal provisioning for IBM Power Systems, installation of Oracle Database and Grid Infrastructure software, as well as database creation.

MAS includes comprehensive tools that automate and simplify numerous daily tasks performed by Sys Admins and DBAs.

Why Automate?
Automating a single task to be performed one time is not worth the effort it takes. For tasks performed routinely - once or many times throughout the day - though, automation proves highly beneficial.

If a DBA can shave three minutes off the time it takes to perform a routine task, this saves 15 minutes weekly, and one hour per month.

Figure 1 shows how many days the automation of just one task can save each year.

Getting Started with MAS
Designed with easy adoption in mind, MAS does not require a complex system infrastructure:
- MAS is installed as a virtual appliance & does not require any agent software on the systems it controls & monitors.
- MAS does not require any special programming skills to create & utilize automations & features, extending the capabilities of existing resources the moment it is installed.
- MAS includes a graphical iOS application, providing a user-friendly & intuitive tool that builds, runs, schedules, tracks, catalogs & monitors processes.
- MAS includes core processes and automation packages called Solution Pacs for organizations to immediately start automating.

The graph shows that saving 30 minutes per day can result in an extra 22 days of productivity per year. On a team of 5 DBAs, this would be 110 days - nearly one-half year of productivity.
MAS Solution Pacs

MAS Solution Pacs make the benefit of technologies and automations immediate.

Solution Pacs are a collection of processes that perform the operations of a specific technology, providing automations for a wide variety of tasks, while limiting the need for specific technology expertise. Each MAS Solution Pac includes access to a Wiki that catalogs its features and usage.

Solution Pacs can be extended to incorporate existing processes, allowing for cataloging and version control.

Automation

MAS enables automation for complex system setup and provisioning tasks, such as:
- VIO server creation & maintenance
- DLPAR / Virtual Server creation
- Installation of Oracle Grid Infrastructure & other database software
- Creation of Oracle Databases
- Oracle DBA functions, such as: RMAN, Data Guard, OEM Agent Deployment, Data Pump, Oracle patching & more

In addition to the core automation Solution Pacs included in every instance of MAS, users can create custom automations that fit their IT environments’ unique needs, and streamline system management, maintenance and growth.

Deployment & Maintenance

Beyond automation, MAS enables users to easily deploy, provision, and maintain databases. Users can spin up and tear down new database instances for test/dev, upgrade, or expansion purposes.

MAS configuration management allows for easy replication of environments to avoid dissimilar deployments and establish system standardization.

Supported Platforms

MAS supports the following platforms:
- Oracle Database
- IBM POWER® / AIX® / PowerVM
- Redhat Enterprise Linux
- Oracle Enterprise Linux
- EnterpriseDB

MAS for iOS APP

Vendita MAS for iOS is available from the Apple app store, and supports the iPhone and iPad. The app allows connection to multiple MAS servers, and client systems.

Users can invoke processes to run MAS automation sequences and programs, then review the output.

The MAS app also allows users to review and edit automation sequences and programs in a graphical editor, utilizing standard flowchart symbols.
Vendita
Solution Brief

Master Automation Sequencer (MAS)

Scalability/Distributed Computing

MAS empowers users to manage large numbers of systems by providing group capability. Users can create groups of servers or databases, then run or schedule to run the same automation against all group members.

DevOps/IaC

DevOps is a paradigm that allows software development teams to instantiate and tear-down their own server and database environments without involvement from Sys Admins or DBAs.

To deliver on DevOps, MAS productizes the concept of Infrastructure as Code (IaC) – where systems are built, provisioned, and managed through code instead of using less flexible scripting or manual processes.

IaC allows for never-before-seen levels of control, and introduces modern organizational procedures that, when practiced, make discipline and governance previously unreachable now possible for servers, storage, and networking.

With MAS and IaC, infrastructure teams can use code to automatically provision and manage on-premises and/or cloud environments, create settings and features, and apply them universally with a touch of a button.

FURTHER INFORMATION

For additional information regarding Vendita MAS or any of the concepts covered in this briefing, please contact Vendita:

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Scheduling

Unique to advanced automation assets, MAS features a fully developed scheduling tool, allowing any action to run at a specific time in the future. MAS’ scheduler also gives users the ability to examine successfully completed or failed tasks, review upcoming tasks, and monitor any critical tasks that require additional scrutiny.

Cost savings based upon MAS simulation and test performed for a customer. Test process available for all potential MAS customers upon request.