Product Description

Session Border Controller as a Service - SBCaaS

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1.1 What is this document about?

This document introduces the **Netaxis Session Border Controller as a Service (SBCaaS)** - a robust, scalable, and managed solution that leverages Netaxis SRE, Nemo and Oracle SBCs, and operates seamlessly within the Oracle Cloud Infrastructure (OCI). Designed to elevate your communication infrastructure, our SBCaaS ensures high-quality, reliable session border control with comprehensive management and support.

1.2 Structure of the Document:

1. **Introduction**

   - Short introduction of the solution and its core capabilities.

2. **Key Features**

   - Oracle SBC Integration
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   - Netaxis Session Routing Engine (SRE)
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1.3 Introduction

The **Netaxis Session Border Controller as a Service (SBCaaS)** is a powerful, scalable, and future-proof solution designed to meet the evolving needs of modern communication service providers. Leveraging the robust capabilities of Oracle SBCs and routing capabilities of the Netaxis Session Routing Engine, all within the Oracle Cloud Infrastructure (OCI), our SBCaaS delivers exceptional performance, security, and reliability.

Whether you are a small to medium-sized provider looking for cost-effective shared environments or a large enterprise requiring dedicated resources and high security, our flexible deployment options cater to your specific requirements. The ability of the solution to scale dynamically with your business growth ensures that you are always ready to meet increasing demand and expand into new markets.

Together with our comprehensive managed service we ensure that your communication infrastructure is expertly maintained and supported, allowing you to focus on your core business activities.

In a rapidly changing technological landscape, the Netaxis SBCaaS offers the assurance of a future-proof infrastructure. Our commitment to continuous innovation and excellence ensures that your communication services remain at the forefront of industry standards.

Transform your communication infrastructure with the Netaxis SBCaaS and experience unparalleled efficiency, performance, and support. Contact our sales team at sales@netaxis.solutions to learn more and embark on a journey towards enhanced communication excellence.

1.4 Key Features:

The **Netaxis Session Border Controller as a Service (SBCaaS)** is built on a foundation of advanced components that work together seamlessly to deliver a robust, scalable, and future-proof communication solution. The key features of our SBCaaS solution are illustrated in the figure below, showcasing the integration of Oracle's cutting-edge and SRE routing technologies within the Oracle Cloud Infrastructure (OCI).

1. **Session Border Controller (SBC)**:

   - At the core of the solution is the Oracle Session Border Controller. This component ensures secure and reliable voice, video, and data communications across IP networks. It provides essential functions such as protocol interworking, media handling, and security features that protect against various threats and attacks.

2. **Session Routing Engine (SRE)**:

   - The centralized Session Routing Engine (SRE) from Netaxis plays a critical role in optimizing call routing. It uses intelligent algorithms to determine the most efficient and cost-effective paths for call traffic, ensuring high-quality service and efficient use of network resources.

3. **Network Monitoring (NEMO)**:

   - Netaxis NEMO provides comprehensive network monitoring capabilities. It continuously monitors network performance and health, offering real-time insights and analytics. This component is essential for proactive issue detection and resolution, ensuring minimal downtime and optimal service delivery.

4. **Oracle Cloud Infrastructure**

   - These components are integrated within the Oracle Cloud Infrastructure, leveraging its powerful computing, storage, and networking capabilities to provide a scalable, secure, and high-performance environment for your communication needs.
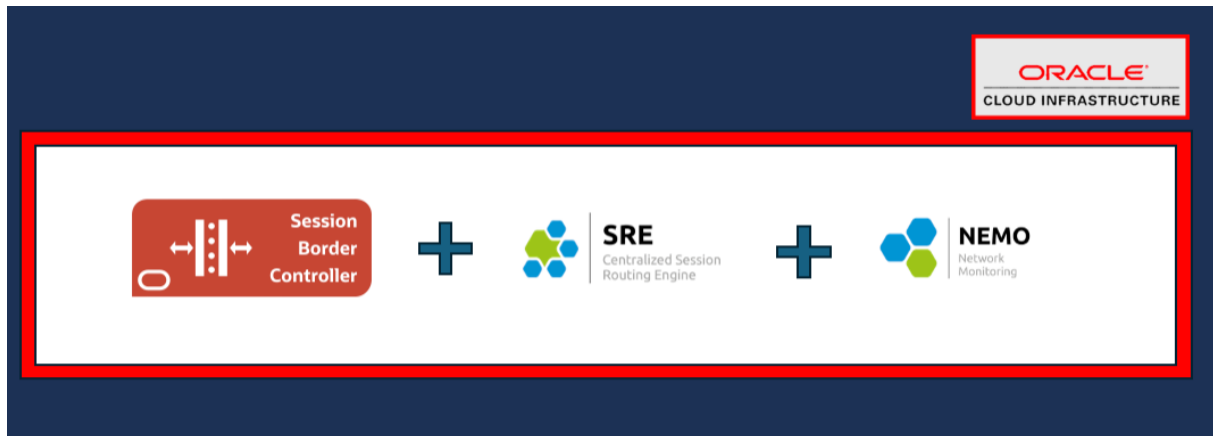
Together, these features create a sophisticated SBCaaS solution that enhances operational efficiency, ensures high-quality service, and supports the future growth of your business.

1.4.1 Key Feature more in detail.

1. **Oracle SBC Integration**:

   - **High-Performance Session Border Controller**:
     - Oracle SBCs provide advanced session management capabilities, ensuring high performance and reliability for voice and video communications.

   - **Security and Compliance**:
     - Built-in security features include robust encryption, intrusion detection, and prevention mechanisms, ensuring compliance with industry standards and protecting against potential threats.

   - **Interoperability**:
     - Oracle SBCs support a wide range of protocols and codecs, ensuring seamless interoperability with diverse communication systems and networks.

2. **Oracle Cloud Infrastructure**:

   - **Secure and Scalable Cloud Platform**:
     - OCI offers a secure, scalable, and high-performance cloud environment, ideal for hosting session border Controller services. It provides the reliability and flexibility needed for dynamic business environments.

   - **Global Reach and Availability**:
     - With OCI's extensive global data center network, you can deploy SBCaaS close to your customers, reducing latency and improving call quality.

- **Comprehensive Cloud Services**:
    - OCI includes a range of integrated cloud services, such as compute, storage, and networking, which can be leveraged to enhance the SBCaaS solution.

3. **Netaxis Session Routing Engine (SRE)**:

- **Advanced Call Routing**:
    - The Netaxis SRE enables precise call management and routing, utilizing sophisticated data models to direct calls to the appropriate customer destinations.

- **Customizable Routing Policies**:
    - Create and manage routing policies tailored to your specific business requirements, ensuring optimal call flow and efficiency.

- **Dynamic and Real-Time Adjustments**:
    - The SRE allows for dynamic adjustments to routing policies based on real-time data, ensuring continuous optimal performance.

4. **Netaxis Network Monitoring (NEMO)**:

- **Comprehensive Monitoring Capabilities**:
    - NEMO provides detailed insights into call statistics and quality metrics, such as packet loss, delay, and jitter, allowing for thorough analysis and proactive troubleshooting.

- **Real-Time Alerts and Notifications**:
    - Set up real-time alerts and notifications for potential issues, enabling swift response to any anomalies that may affect service quality.

- **Historical Data and Reporting**:
    - Access historical data and generate reports to analyze trends and performance over time, supporting informed decision-making and long-term planning.

1.5 Comprehensive Managed Service:

Netaxis SBCaaS offers a fully managed service that encompasses the entire lifecycle of the SBC and the SRE, from deployment to ongoing maintenance and support. This comprehensive approach ensures that service providers and partners can focus on their core business operations while we handle the complexities of the SBC management.

1.5.1 Customer Onboarding:

- **Simplified Onboarding Process**:

- Our onboarding process is designed to be straightforward and efficient, minimizing the time and effort required to bring new customers online. We handle the configuration and initial setup, ensuring a smooth transition.

- **Automated Provisioning** (roadmap):

  - Automated tools and scripts streamline the provisioning of new customers, reducing manual intervention and accelerating the deployment timeline.

- **Customized Setup**:

  - Tailor the setup to meet specific customer requirements, ensuring that the solution aligns with their unique needs and business objectives.

1.5.2 Ongoing Support:

- **24/7 Monitoring and Maintenance**:

  - Our team provides around-the-clock monitoring and maintenance, ensuring the system is always running optimally. We proactively address potential issues before they impact service quality.

- **Regular Updates and Patches**:

  - We keep the system up-to-date with the latest security patches and software updates, ensuring continuous protection against emerging threats and maintaining compliance with industry standards.

- **Technical Support**:

  - Access to a dedicated support team that offers expert assistance for troubleshooting and resolving issues. Our support team is equipped to handle a wide range of technical challenges and provide timely solutions.

- **Performance Optimization**:

  - Continuous performance monitoring and optimization to ensure the SBCaaS solution delivers the best possible service quality. This includes adjusting configurations and tuning system parameters to meet evolving customer demands.

- **Scalability Management**:

  - We manage scalability to accommodate growing customer needs. Whether it's scaling up to handle increased call volumes or scaling out to support new geographic regions, we ensure seamless scalability without service disruption.

- **Training and Documentation**:

  - Provide comprehensive training and detailed documentation to customers, ensuring they are well-equipped to utilize the SBCaaS solution effectively. This includes user manuals, best practices guides, and ongoing educational resources.

1.5.3 Benefits of the Managed Service:

- **Reduced Operational Overhead**:

  - By outsourcing the SBC management to Netaxis, customers can significantly reduce their operational overhead and focus on their core business activities.

- **Enhanced Reliability and Performance**:

  - With continuous monitoring, regular updates, and expert support, customers benefit from enhanced system reliability and performance, leading to improved service quality.

- **Peace of Mind**:

  - Knowing that the SBC infrastructure is in the hands of experts, customers can enjoy peace of mind and confidence in the stability and security of their communication services.

The comprehensive managed service provided by Netaxis ensures that the SBCaaS solution is not only powerful and flexible but also easy to maintain and support, delivering a seamless and reliable experience for service providers and their customers.

1.6 Deployment Options:

Netaxis SBCaaS offers flexible deployment options to cater to the varied needs of service providers. These options ensure that our solution can be tailored to meet specific performance, security, and cost requirements.

1.6.1 Standard Deployment:

- **Shared Cloud + Shared Environment**:

  - **Cost-Effective Solution**:
    * This deployment model is designed to be budget-friendly, making it an excellent choice for service providers looking to minimize costs while still benefiting from the full range of SBCaaS features.

– **Shared Resources**:

* Multiple customers share the same SBC instances within the OCI, optimizing resource utilization and lowering the overall cost.

– **Quick and Easy Setup**:

* The shared environment allows for faster setup and provisioning, enabling service providers to quickly bring new customers online.

– **Ideal for Small to Medium-Sized Providers**:

* This option is well-suited for small to medium-sized service providers who need reliable SBC functionality without the expense of dedicated resources.

1.6.2 Advanced Deployment:

• **Shared Cloud + Dedicated Instances**:

– **Enhanced Performance and Security**:

* Each customer has their own dedicated SBC instances within the shared OCI infrastructure, providing better performance and enhanced security.

– **Isolation of Resources**:

* Dedicated instances ensure that resources are not shared with other customers, reducing the risk of performance degradation and improving data security.

– **Customizable Configuration**:

* Service providers can customize the configuration of their dedicated instances to better meet their specific needs and performance requirements.

– **Scalable**:

* This deployment option supports easy scaling as customer needs grow, allowing for additional instances to be added without significant reconfiguration.

• **Dedicated Cloud + Dedicated Instances**:

– **Maximum Performance and Security**:

* This deployment model provides the highest level of performance and security by offering both a dedicated cloud environment and dedicated SBC instances.

– **Complete Resource Control**:

* Customers have full control over their cloud resources, ensuring optimal performance and the highest level of data protection.

– **Ideal for Large Enterprises**:

* This option is perfect for large enterprises or service providers with stringent security and performance requirements.

– **Highly Customizable**:

* The dedicated cloud environment allows for extensive customization and integration with other enterprise systems and services.

– **Future-Proof**:

* With the dedicated resources and isolated environment, this deployment is well-suited for long-term growth and evolving business needs.

1.6.3 Benefits of Deployment Options:

• **Flexibility**:

– The various deployment options provide flexibility to choose the solution that best fits your business model, budget, and technical requirements.

• **Scalability**:

– Both standard and advanced deployments are designed to scale with your business, ensuring that the SBCaaS solution can grow alongside your customer base.

• **Security**:

– Advanced deployment options offer enhanced security features, catering to customers with higher security and compliance needs.

• **Performance**:

– Dedicated instances and environments ensure that performance is not compromised, providing a consistent and high-quality user experience.

By offering these deployment options, Netaxis SBCaaS ensures that Service Providers can select the best configuration to meet their unique needs, providing a tailored solution that aligns with their business objectives and operational requirements.

1.7 Advantages for Service Providers:

Netaxis SBCaaS offers numerous advantages tailored to enhance the capabilities, efficiency, and service quality of Service Providers. These benefits help them to focus on their core business, reduce operational complexities, and deliver superior service to their customers.

1.7.1 Shared SBC Environment:

- **Cost Efficiency**:

  - By leveraging a shared SBC environment, Service Providers can significantly reduce their infrastructure costs. The shared model allows multiple customers to utilize the same SBC resources, spreading the cost and making it more economical.

- **Resource Optimization**:

  - Efficient use of resources ensures that capacity is utilized optimally, avoiding the waste associated with underused dedicated resources.

- **Simplified Management**:

  - Managing a shared environment simplifies the administrative burden, as updates, maintenance, and scaling are handled centrally by Netaxis.

1.7.2 Data-Driven Call Routing:

- **Enhanced Call Management**:

  - The Netaxis Session Routing Engine (SRE) provides advanced call routing capabilities, using sophisticated data models to ensure calls are directed to the appropriate destination efficiently.

- **Improved Call Quality**:

  - Data-driven routing minimizes delays and reduces the likelihood of call drops, improving overall call quality and customer satisfaction.

- **Customization**:

  - Routing policies can be tailored to meet specific business requirements, providing flexibility to address unique customer needs and scenarios.

1.7.3 Seamless Integration:

- **Compatibility with Existing Systems**:

  - The SBCaaS solution integrates seamlessly with existing communication systems, allowing Service Providers to enhance their infrastructure without significant changes.

- **Support for Cloud Contact Centers**:

– Easy integration with new applications such as Cloud Contact Centers, enabling Service Providers to expand their service offerings and improve customer interactions.

• **Leverage OCI Services**:

– Benefit from the comprehensive suite of Oracle Cloud Infrastructure (OCI) services, including compute, storage, and networking, to enhance and extend the capabilities of the SBCaaS solution.

1.8 Additional Advantages:

1.8.1 Scalability and Flexibility:

• **Dynamic Scaling**:

– The SBCaaS solution is designed to scale dynamically with the growth of the Service Providers' customer base. Whether handling increased call volumes or expanding into new regions, the solution can scale without disrupting service.

• **Flexible Deployment Options**:

– Choose from standard or advanced deployment options based on performance, security, and cost requirements, ensuring the solution fits perfectly with your business needs.

1.8.2 Enhanced Security and Compliance:

• **Robust Security Features**:

– Oracle SBCs include advanced security features such as encryption, intrusion detection, and prevention mechanisms, ensuring communication is secure and compliant with industry standards.

• **Isolation in Advanced Deployments**:

– Dedicated instances and environments provide enhanced security through resource isolation, reducing the risk of data breaches and ensuring compliance with stringent security regulations.

1.8.3 Operational Efficiency:

• **Managed Service**:

– Netaxis handles the entire lifecycle of the SBC management, from deployment to ongoing maintenance and support, reducing operational overhead for service providers.

- **24/7 Monitoring and Support**:

  – Continuous monitoring and dedicated support ensure that any issues are quickly identified and resolved, maintaining high service availability and reliability.

1.8.4 Improved Customer Experience:

- **High-Quality Communications**:

  – By leveraging advanced routing, monitoring, and cloud infrastructure, the SBCaaS solution ensures high-quality voice communications, leading to better customer satisfaction.

- **Proactive Issue Management**:

  – Real-time monitoring and alerts allow for proactive management of potential issues, ensuring minimal impact on end-users and maintaining service continuity.

1.8.5 Conclusion:

The Netaxis SBCaaS solution provides Service Providers with a powerful, flexible, and cost-effective platform to manage their communication infrastructure. With its advanced features, comprehensive managed services, and multiple deployment options, SBCaaS empowers Service Providers to deliver high-quality, reliable, and secure communication services to their customers.