ORACLE®
ADVANCED CUSTOMER SUPPORT

Oracle Network Grade Support

Maximum Availability and Performance
for Oracle Communications Solutions

ORACLE®

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"Oracle's solutions portfolio spans the entire systems landscape for the telecommunications industry. It enables us to differentiate our brand through innovative services and not just price. Oracle Communications Network Charging and Control offers unmatched flexibility for designing subscription models and delivering unlimited scalability. With 24/7 access to Oracle Advanced Customer Support Services engineers, we ensure system reliability and leverage the full capabilities of our software tools."

MUHAMMAD YASEEN
SENIOR MANAGER, APPLICATION SUPPORT OPERATIONS
EMIRATES INTEGRATED TELECOMMUNICATIONS COMPANY PJSC

Executive Summary

This white paper provides an overview of Oracle Network Grade Support, a service specifically designed for Oracle communications platforms. A case study of a well-known telecommunications provider gives insight into a typical engagement and how the client benefits from the service.

The telecommunications industry is very technology-driven. Specially designed applications and platforms allowing faster development of new offerings, leading throughput performance, and more-efficient operation can be a decisive factor in the competitive race. Oracle offers telecommunications providers an entire product suite upon which they can build their success.

Cutting-edge technology is only one part of the story, though. Business-critical communications platforms need to operate reliably every minute, every hour, every day of the year. Service disruptions might be felt by millions of users and can have a severe impact on a company's reputation and financial results. There may also be regulatory implications of not being able to deliver the services to customers.

Analyst reports suggest the typical hourly cost of downtime in the communications industry as US$2 million.

Typical Hourly Cost of Downtime by Industry (in US Dollars)	
Brokerage Service	6.48 million
Energy	2.8 million
Telecom	2.0 million
Manufacturing	1.6 million
Retail	1.1 million
Health Care	636,000
Media	90,000
Sources: Network Computing, the Meta Group and Contingency Planning Research. All figures in U.S. dollars.	

Figure 1. Vision Solutions white paper, "Assessing the Financial Impact of Downtime"

Expert support ensuring business continuity, high availability, and risk mitigation is crucial in such mission-critical environments. Having an efficient business operation in place is an important factor for financial performance as well.

Fast-growing telecommunications providers such as Telekom Slovakia and Emirates Integrated Telecommunications Company PJSC (EITC) Dubai (brand name "du") rely on Oracle Advanced Customer Support for the support and maintenance of their mission-critical communications platforms.

With Oracle Network Grade Support, Oracle Advanced Customer Support developed a unique service based on service-level agreements (SLAs) for Oracle's communications-specific solutions, keeping risk from these crucial systems and ensuring flawless business operation without surprises.

Proactive health checks, configuration tuning, or patch implementations avoid critical incidents and allow improved return on customers' investment in Oracle technology. If incidents do occur, focused teams of support engineers with intimate knowledge about their customers' platforms, and with prioritized escalation procedures, fix the issue in accordance with the SLAs. If necessary, Oracle Advanced Customer Support teams directly engage Oracle product development and engineering. Assigned technical account managers plan and coordinate service delivery and provide valuable advice to achieve their customers' operational and business goals. Oracle Network Grade Support is backed by SLAs.

Business Requirements

Operating mission-critical solutions in the communications industry presents a number of challenges:

- **High availability, no unplanned downtimes, and risk mitigation.** Even a minor service disruption might be felt by millions of subscribers of a telecommunications service and can lead to significant monetary and reputational losses.

- **Optimized performance.** Communications platforms and business solutions are usually comprised of a multitude of products. Such solutions provide expected business results only if all components are perfectly configured, tuned, and integrated, as well as continuously expertly maintained.

- **Efficiency and cost control.** Telecommunications providers make significant investments in their IT and network stack. Special skills and best practices are needed—no matter where the data centers are physically located—to optimize financial and business return on investment (ROI) and total cost of ownership (TCO).

- **Regulatory compliance.** Governments in many countries have legal requirements for telecommunications providers to meet certain service-level targets in support of their end users.

Oracle Support Solution for Mission-Critical Telecommunications Platforms

Oracle Support helps customers take full advantage of the features and functions of their Oracle solutions and ensures business continuity with optimized performance. For business-critical platforms where unplanned downtime is not an option, Oracle offers a combined support model with the highest service levels and monetary fulfillment commitments.
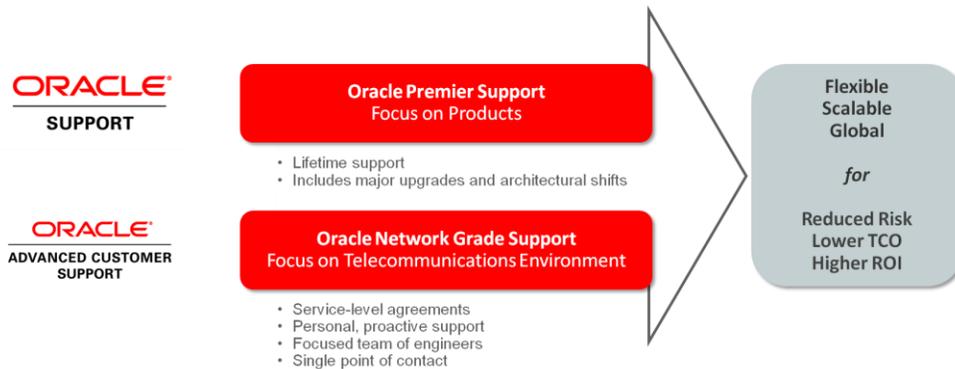

Figure 2. Oracle Support for telecommunications operations

- **Oracle Premier Support** provides access to expert assistance remotely using the My Oracle Support portal, software enhancements, fixes, and upgrades, along with lifetime support. Oracle Premier Support covers the complete Oracle technology stack. Customers have access to the largest global support infrastructure in the industry. Eighteen global support hubs with 15,000 resources support customers in 29 local languages, in 145 countries, and in any time zone. With Oracle Premier Support, customers receive future product releases that incorporate the latest technologies and new features; upgrades to new architectures; industry best practices; patches and fixes; and annual tax, legal, and regulatory updates—all at no additional charge. More information.

- For customers with enhanced support requirements due to extremely complex, business-critical IT environments, **Oracle Advanced Customer Support** comes into play. Oracle Advanced Customer Support builds upon the foundation set by Oracle Premier Support, providing personalized, proactive support and prioritized service request (SR) resolution to help customers maximize the availability, performance, and value of their Oracle solutions. Oracle Advanced Customer Support engineers and technical account managers have on average more than 10 years of experience in Oracle technology. They gain an intimate understanding of their clients' environment and objectives and thus deliver truly personalized support and guidance. More information. One of Oracle Advanced Customer Support's offerings is **Oracle Network Grade Support**, specifically designed for optimum support of the Oracle product set for telecommunications providers.

Service Feature	Oracle Premier Support	Oracle Network Grade Support
Free upgrades and feature enhancements, bug fixes, critical patches	■	
24/7 remote response	■	
Access to support portal	■	
SLAs for response, restore, and resolve times		■
Direct routing of critical issues to dedicated support team 24/7		■
Assistance in issue reproduction		■
Problem avoidance, root cause analysis		■
Local technical account manager, single point of contact		■
Named technical lead		■
Service delivery plan and reviews		■
Escalation management		■
Onsite specialist visit for critical events		■
Ad hoc functional advice on phone		■
Standby assistance for major change management activities		■
Proactive, customer-specific software advice		■

Figure 3. Key features of Oracle Premier Support and Oracle Network Grade Support

Oracle Network Grade Support

"Network lifecycle services are a set of all activities that are necessary to plan, assess, design, build, test, operate, manage, and support the network areas. We distinguish three main services, such as network consulting and integration, network outsourcing services, and network support and training services."

SYLVIA WUNSCHE, IDC RESEARCH ANALYST, "EMEA NETWORK LIFE-CYCLE SERVICES," JANUARY 2015

Oracle Network Grade Support provides maximum value for Oracle Communications applications. A balanced mix of reactive and proactive services delivered by specialized senior Oracle engineers helps to ensure high availability, risk mitigation, and fast issue resolution. In addition, all services are backed by service-level agreements (SLAs).

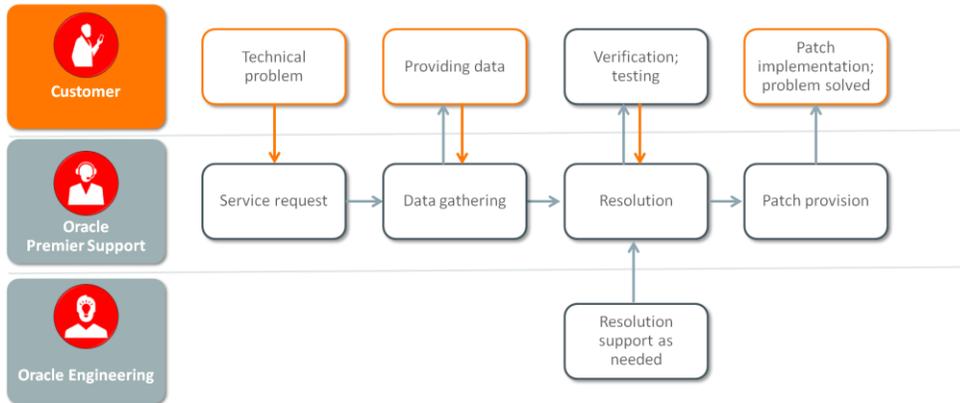## Sample SR Resolution with Oracle Premier Support

Figure 4. Sample SR resolution with Oracle Premier Support

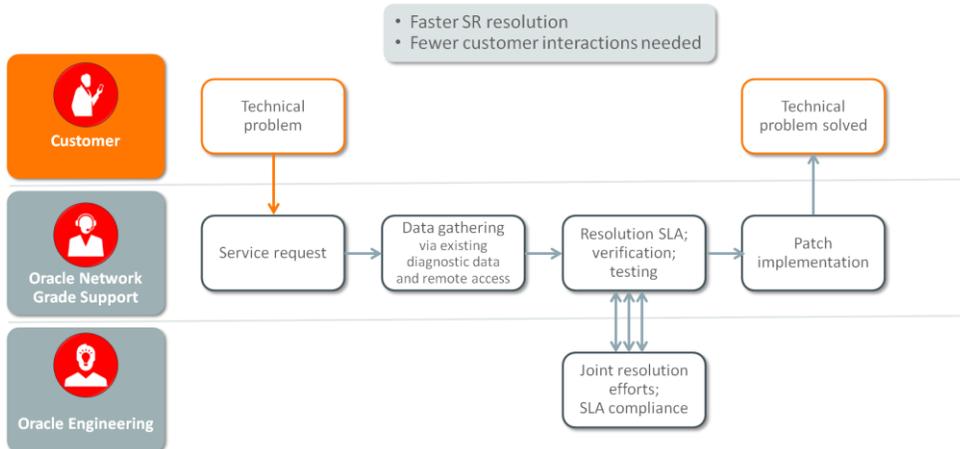## Sample SR Resolution with Oracle Network Grade Support

Figure 5. Sample SR resolution with Oracle Network Grade Support

Customer Benefits

Through the comprehensive support model comprised of reactive and proactive components delivered by a unique team of technical specialists, Oracle Network Grade Support reliably provides the value communications providers are looking for.

- Risk mitigation

  - Detecting risk areas before they can become issues and avoiding unplanned outages through system monitoring, risk assessments, and proactive guidance

- - Faster SR resolution if incidents do occur through prioritized escalation and personal support

- Optimized performance and high availability

  - Leveraging Oracle technology in full through configuration assessments and guidance on systems tuning

- Seamless support across the stack through solution-oriented support

- Increased efficiency

  - Fewer resources needed for escalation management and short-term fixes

  - Skills enhancements through direct knowledge transfer and tailored training sessions

  - Transparent service delivery according to plan

- Cost control

  - Avoiding high cost of downtime

  - Reduced expenses on workarounds and external consultants

  - Fixed-price contract with clear scope and deliverables, and SLA commitments

Service Features

Each Oracle Network Grade Support customer is supported by a focused team: a technical account manager; a technical leader; and Oracle advanced support engineers, who have profound expertise in the Oracle product set.

Each SR receives priority from the start, putting customers in direct contact with senior technical support engineers. Oracle Network Grade Support priority handling also includes a 24/7 dedicated hotline to resolve issues faster. Customers can gain unique access to Oracle engineers and developers if required.

Through requirements analysis, definition of key performance indicators (KPIs), and service delivery planning in close cooperation with the customer, Oracle Network Grade Support creates a tailored, proactive support solution precisely addressing the defined goals. A comprehensive governance process with detailed documentation and reporting provides transparency, flexibility, and control. The service delivery plan and the KPIs are reviewed regularly with the customer throughout the duration of the contract.

Another important service feature is proactive technical advice on the customer's software environment. Activities can include

- Information on Oracle notifications, alerts, releases, and patches related to the customer's Oracle software environment, including critical patch updates

- Guidance on Oracle software and software management operations

- Assistance with existing or new support tools

- Configuration advice on production environments

- Procedural advice on the administration of Oracle software environments

In addition, customers have the option of choosing Oracle Advanced Monitoring & Resolution Service, which provides 24/7 proactive system monitoring and management, to help reduce the IT operation team's basic workload with proactive notification of potential issues. More information.

The service portfolio is tailored to the customer's needs, and can evolve over time. For example, if the customer is experiencing frequent unplanned outages, the initial focus will be on baseline configuration reviews to detect the issues and bring the number of SRs down. Once the system is brought back into stable operation, there will be more and more room for proactive deliverables and guidance such as advanced diagnostics, patch planning, and systems optimization.

TABLE 1. SERVICE FEATURES

ORACLE NETWORK GRADE SUPPORT

24/7 advanced support team with

- Technical account manager
- Technical leader
- Advanced support engineers
- Additional onsite advanced support engineers (optional)

Tailored service delivery plan and governance

Dedicated toll-free hotline

Escalation management

Priority handling of SRs

Proactive and preventive technical advice

24/7 Advanced Monitoring and Resolution (optional)

SLAs for response, restoration, and resolution times

Delivery Architecture

Key differentiators of Oracle Network Grade Support are the profound product expertise and experience of the advanced support engineers, and the delivery architecture that lets customers take advantage of that expertise—no matter where they are located.
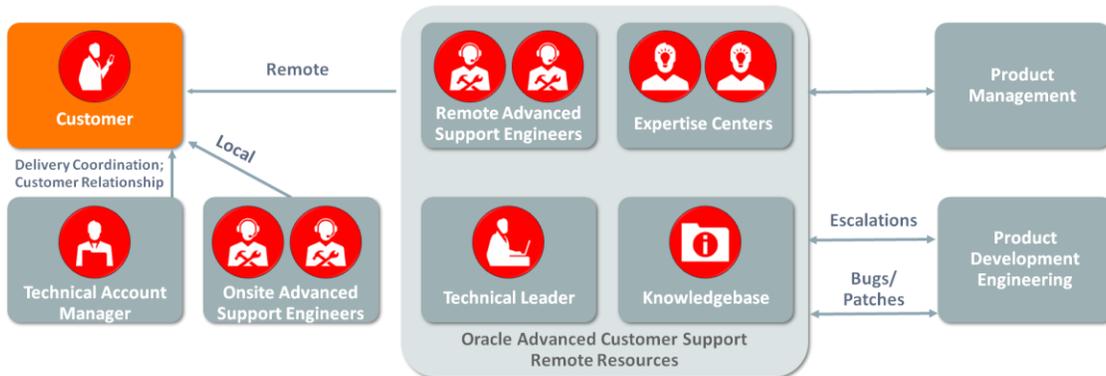

Figure 6. Oracle Network Grade Support delivery architecture

In a very senior role, the **technical account manager** owns the service delivery plan, and coordinates delivery across the customer's Oracle stack. He or she is regularly at the customer's site. With deep involvement in the customer's day-to-day business, the technical account manager has a thorough understanding of their requirements and can give valuable advice on how best to address them.

The **technical leader** has the deepest technical expertise on the customer's platform and is the central coordinator of all technical aspects of the engagement. Some of the technical leader's responsibilities are to define upgrade roadmaps and patch plans and to arrange knowledge transfer sessions for the customer. He or she involves other technical resources as needed, such as Oracle product development and engineering.

Advanced support engineers have more than 10 years of experience in supporting large, complex Oracle environments. They have accumulated profound technical expertise across the entire Oracle product stack, and constantly expand their qualifications through trainings and certifications. Advanced support engineers can deliver their services onsite or remotely, as defined in the service delivery plan.

Oracle Advanced Customer Support expertise centers—for specific technologies such as remote systems monitoring or for product areas such as database or applications—enhance the customer-assigned resources as needed.

Beyond their individual skill set, advanced support engineers access and share best practices worldwide through a unique knowledgebase, allowing faster issue resolution, and the implementation of efficient solutions. Most issues have occurred before sometime, somewhere. The Oracle Advanced Customer Support knowledgebase provides more than 500,000 documents, growing by roughly 8,000 new documents each month.

Oracle Network Grade Support has direct access to Oracle product development and engineering. This can speed up resolution times for critical incidents dramatically, and can help with the development of customer-specific solutions.

Service-Level Agreements

Given the business-critical nature of the supported platforms, Oracle Network Grade Support provides strong SLAs. All rules around these commitments are defined in contractual documents. Any statements in this white paper are for informational purposes only and not warranted.

Oracle's Severity Level definitions are available in the applicable Oracle Technical Support Policies, which may be accessed at http://www.oracle.com/support/policies.html.

- Severity Level 1: The production use of the supported programs is stopped or so severely impacted that the customer cannot reasonably continue work. The customer experiences a complete loss of service. The operation is mission-critical to the business and the situation is an emergency. A Severity Level 1 SR has one or more of the following characteristics:
    - Data is corrupted.
    - A critical documented function is not available.
    - System hangs indefinitely, causing unacceptable or indefinite delays for resources or response.
    - System crashes, and crashes repeatedly after restart attempts.
- Severity Level 2: The customer experiences a severe loss of service. Important features are unavailable with no acceptable workaround; however, operations can continue in a restricted fashion.

Each SR that is deemed Severity Level 1 or Severity Level 2 in accordance with the Oracle Technical Support Policies will be subject to the target times set forth in the following table.

TABLE 2. ORACLE NETWORK GRADE SUPPORT SERVICE-LEVEL PERFORMANCE TARGETS

Time	Severity Level 1 SRs	Severity Level 2 SRs
Response time	15 minutes	15 minutes
Restoration time	4 hours	12 hours
Resolution time	30 days	45 days

If the average final response, restoration, or resolution times for either all Severity Level 1 SRs or all Severity Level 2 SRs in an applicable calendar month is greater than the applicable time(s) set forth in the table above, customers shall be entitled to a service-level credit for such month subject to the terms and conditions set forth in the contract between the parties.

Covered Products

The list of covered products is constantly being expanded. Oracle Advanced Customer Support sales representatives can verify product coverage and provide further information.

TABLE 3. COVERED PRODUCT GROUPS AS OF APRIL 2015

Oracle Communications Service Delivery Platform
Oracle Communications Network Charging and Control
ACME Packet
Oracle Communications Diameter Signaling Router
Oracle Communications EAGLE
Oracle Communications Performance Intelligence Center
Oracle Communications Policy Management
Oracle Communications Subscriber Database Manager
Oracle Communications Order and Service Management Server
Oracle Communications ASAP
Oracle Communications Unified Inventory Management
Oracle Communications Billing and Revenue Management

Oracle Network Grade Support also seamlessly supports predefined solutions built from eligible Oracle products such as

- Oracle Communications Rapid Offer Design and Order Delivery. A product-based, preintegrated solution that allows customers to accelerate design and delivery of products, services, and bundles across multiple channels rapidly and accurately.

- Oracle Communications Rapid Service Design and Order Delivery. A product-based service fulfillment solution that lets service providers rapidly and efficiently design, launch, and deliver any type of service for any network domain on a single, convergent, scalable platform.

Customer Case Study

"Oracle Advanced Customer Support Services is an extension of our IT team. The group is our trusted partner and consultant with telecommunications expertise and intimate knowledge of our business. With Oracle's support, we are now the leading provider of prepaid mobile communications in the region."

MUHAMMAD YASEEN

SENIOR MANAGER, APPLICATION SUPPORT OPERATIONS
EMIRATES INTEGRATED TELECOMMUNICATIONS COMPANY PJSC

Many customers around the world rely on Oracle Network Grade Support for their business-critical Oracle platform. A closer look at one of these engagements may illustrate the capabilities of this service.

Emirates Integrated Telecommunications Company PJSC (EITC), listed under the brand name "du" on the Dubai Financial Market, is a relatively new and rapidly growing provider of mobile, landline, data, and internet protocol television services in the United Arab Emirates.

du chose an Oracle product environment for its IT platform. The deployment of Oracle Communications Network Charging and Control enabled online charging, balance query, and real-time credit management for prepaid mobile communications customers, resulting in significant increase of market share within six years from brand launch.

du's IT team has strong goals for the operation of this business-critical platform:

- Prevent any risk to the business-critical systems; maintain operation continuity and constant availability of critical communications network systems

- Enable rapid time to market for new products and services to gain competitive advantage

- Operate online prepayment of mobile communications services efficiently for positive business results

Oracle Network Grade Support helps du to achieve these goals with a comprehensive service solution.

A team of onsite and remote advanced support engineers with profound expertise in Oracle Communications products is assigned to the account, and delivers reactive and proactive services. A technical account manager plans, coordinates, and supervises the service delivery in close communication with the customer.

TABLE 4. ORACLE NETWORK GRADE SUPPORT FOR DU

Oracle Network Grade Support Deliverables for du	Customer Benefits
Proactive advice, patching, configuration, and diagnostics.	High availability and optimized performance of Oracle Communications Network Charging and Control applications while reducing the workload of the customer's staff. No unplanned downtimes since contract start.

Oracle Network Grade Support Deliverables for du	Customer Benefits
Assessments and configurations of the platform before peak periods such as Islam's most important festivals. Onsite assistance during those peak periods.	Ability to accommodate extreme usage increase, allowing flawless end user experience and strong revenue growth.
Onsite assistance and guidance during hardware and software implementations and upgrades, and during larger change implementations.	A safety net for du's in-house staff, providing peace of mind. Fast time to market according to plan for innovative mobile communications offerings with Oracle Communications Network Charging and Control.
Knowledge transfer through hands-on assistance and targeted technology workshops.	Skills enhancements. Effective use of the Oracle products' features and functions to achieve positive business results.

Implementation of the support solution followed a detailed methodology, addressing du's immediate priorities first. Quarterly reviews of KPIs provide transparency and control, and allow for flexible adjustments as needed.

Oracle Network Grade Support is a comprehensive support solution for du, providing the stability and security they need for their business-critical platform as a foundation for their commercial success.

Conclusion

Some industries rely more on IT and network infrastructures than others. Where a more sophisticated platform, more-efficient operation, and higher performance can bring the decisive competitive advantage, customers need to keep that platform safe.

Oracle Network Grade Support is a high-end service offering specially designed for these scenarios. Fully committed and specialized engineers detect and mitigate risks before they can become issues, and help their customers to make the most of their investment in Oracle products to achieve their business goals.

Further Information

Glossary

TABLE 5. GLOSSARY

Acronym/Term	Description
KPI	key performance indicator
My Oracle Support	Oracle's 24/7 web-based customer support systems
ROI	return on investment
SLA	service-level agreement
SR	service request
TCO	total cost of ownership

Links

Oracle Advanced Customer Support

Oracle Premier Support

Data Sheet: Oracle Network Grade Support

Data Sheet: Oracle Solution Support Center

Oracle Communications Solutions

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Oracle Network Grade Support

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Oracle is committed to developing practices and products that help protect the environment