

# Unleash the power of Header Manipulation Rules with Oracle Communications Consulting

Anyone who operates a next generation communications network will agree that the Session Initiation Protocol – SIP for short – is by no means an exact science. SIP offers communications providers tremendous flexibility and adaptability, but even the smallest of protocol inconsistencies between clients and servers can wreak complete havoc in a communications network. It is critical that all network elements and devices participating in a VoIP call have a precise understanding of what to send and receive within the SIP signaling – and that expectations are always met. The details really matter; consequences such as dropped calls or even customer downtime are grave, not to mention costly.

## THE SECRET SAUCE: HEADER MANIPULATION RULES

Fortunately for service providers and enterprises alike, Oracle Session Border Controllers (SBCs) offer an unbelievably unique feature set that possesses magical powers. Header Manipulation Rules (HMRs) provide the ability for SBC operators to manipulate SIP messages – and through configuration rather than coding. HMR can alter the contents of SIP headers, URIs, parts of URIs, SIP MIME bodies, SDP, XML, ISUP and more.

HMR allows service providers and enterprises to work around countless problems inherent to SIP networks: interworking issues, proprietary implementations of SIP, bugs within SIP implementations, inconsistent feature sets – the list goes on. And those workarounds happen on the spot. Operators are granted such tremendous control over their call flows; more often than not, they can resolve SIP related issues without having to upgrade the SBC, without submitting enhancement requests and, most importantly, without having to wait.



**Oracle Communications Consulting helps you maximize the power of HMRs by:**

- Educating your operations team on the HMR feature
- Providing a deep-dive with examples of header manipulations
- Providing HMR configurations services to resolve SIP interoperability or functionality issues

## ORACLE COMMUNICATIONS CONSULTING PROVIDES HMR EXPERTISE

When it comes to HMR, SIP troubleshooting is far and away the most complicated aspect. Knowing the proper syntax of how to construct header and element rules is only useful if you're able to decipher SIP traces and pinpoint the signaling error that needs correction.

Fortunately, SIP troubleshooting is an area of immense strength for Oracle Communications Consulting (OCC). Being that they are traditionally situated at the network edge, SBCs have always been ideally positioned for network troubleshooting – and that has always required OCC Consultants to have a deep-rooted knowledge of SIP. Sometimes it's better to let the knowledgeable professionals to do the work for you so that you can concentrate on the business of keeping your communications network running smoothly. Oracle Communications Consultants have a wealth of experience using the power of Header Manipulation Rules to modify SIP messaging in every size of communications network.

## EMERGENCY PREPAREDNESS FOR MAINTENANCE WINDOWS

Deploying new software loads into a communications network is expensive both in time and effort. Traffic migrations, equipment upgrades, regression testing – in all these circumstances, the worst possible phrase one can hear is *"We need to roll back"*.

Here in OCC, we encourage our customers to enlist the help of our Consultants to participate in maintenance windows of all kinds – even events that don't involve changes to SBC configurations. Whether it's the introduction of a new Unified Communications vendor or an upgrade of an existing application server, as long as the SBC is in the call flow then HMR can serve as a secret weapon to sidestep many SIP anomalies encountered along the way. HMR provides a tactical means to increase success rates across maintenance windows – and OCC Consultants are always happy to assist.

## ORACLE COMMUNICATIONS CONSULTING CAN SHOW YOU HOW

OCC is always eager to strengthen our customers' Telecom Operations teams. We offer Knowledge Transfer modules on a variety of SBC related topics; of these, one of the most popular is HMR. Our interactive workshop leads SBC operators through the intricacies of HMR development, testing and deployment. We even provide a primer on regular expressions, which is one of the more daunting aspects of HMR. Our focus on Best Practices and performance optimization ensure that customers introduce HMRs properly, right from the start.

## TRUST THE EXPERTS

**HMR is an invaluable tool – provided you know how to use it!** Oracle Communications Consulting has unparalleled expertise in helping service providers and enterprises sidestep costly catastrophes within their networks with the successful implementation of HMRs. With hundreds of service providers and thousands of enterprises trusting Oracle SBCs to secure their voice networks, we have the experience to help your organization ensure that when it comes to SIP signaling, your network integrity remains uncompromised.

**Oracle Communications Consulting Managed Services offers your enterprise:**

- Expertise with Session Border Controllers and associated Oracle Communications products
- Unparalleled 24x7x365 troubleshooting and incident resolution capabilities
- Project leadership and management skills critical to your success
- Mission critical support for operational activities and issues
- Change management, software release management & more
- Executive reporting, alerting, and dashboards

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