



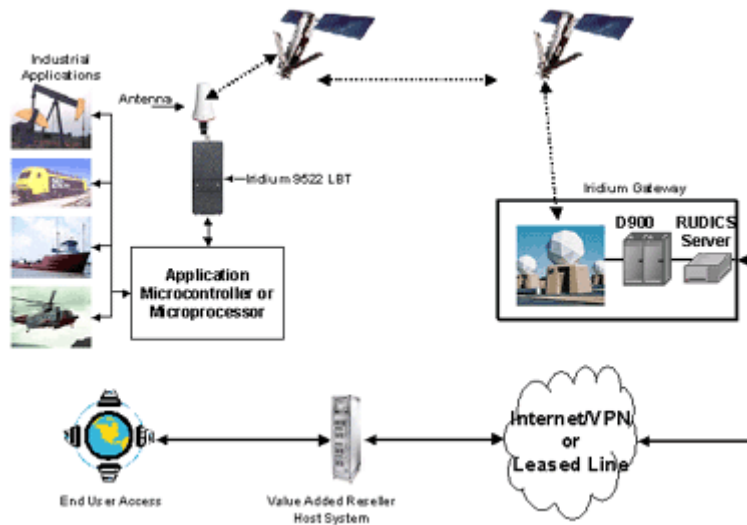
## IRIDIUM RUDICS DATA SERVICE OVERVIEW

Router-Based Unrestricted Digital Interworking Connectivity Solution (“RUDICS”) is an enhanced Gateway termination/origination capability for circuit switched data calls across the Iridium satellite network. It is ideally suited for maintaining tracking & telemetry data connections with high value, mobile sensor platforms such as AUV’s, UAV’s and ocean gliders.

There are four primary benefits of using RUDICS as part of a data solution over conventional PSTN circuit switched data connectivity or mobile-to-mobile data solutions:

- 1) Elimination of analog modem training time
- 2) Increased connection quality, reliability, and maximizing throughput
- 3) Protocol independence
- 4) Both Mobile Originated and Mobile Terminated calls are rated at the same rate

The basic architecture is illustrated in the diagram below:



Remote applications use AT Commands to control any circuit switched data capable Iridium Subscriber Unit (ISU). The remote application dials a customer specific Iridium number, which connects the call through the Siemens D900 switch, to the RUDICS server. This customer specific number is assigned and provisioned by Iridium. Each ISU is authenticated using Calling Line Identification for the RUDICS customer specific number that it dialed. Once authenticated the call is routed over the terrestrial connection to a pre-configured Internet Protocol (IP) address and Port at the Value Added Reseller’s location. This IP address and Port is the Value Added Reseller’s host application server. The RUDICS equipment will support the follow service types: TCP/IP encapsulation, PPP, and MLPP.

The Host application can make a Mobile Terminated call by opening a Telnet session to the RUDICS server. Once authenticated, a series of AT Commands are used to connect to the remote ISU and establish a circuit switched data call.

Connectivity between the Iridium Gateway and the VAR Host Server can be via a number of options, including:

- Internet
- Internet with Virtual Private Network
- Frame Relay
- T1/E1 Leased Line

Additionally, the RUDICS capability offers the capability for multi-link Point to Point Protocol (PPP). This is where multiple ISU's can be used to send data simultaneously and the data can be delivered in an N x 2400 bps PPP connection

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