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Printed in the USA.

## Introduction

As an ISP you offer a service which generally includes some kind of access to the Internet. This can be through dial-up modems, DSL, cable, wireless... you name it! What separates you from the competition? Their only two ways of differentiating your ISP in a broad definition. This is determined by the type of ISP you established whether it be a facilities based provider or Virtual ISP provider. But how does the client community distinguish these differences? They don't.

As an ISP you have the challenge of creating the difference between yourself and the ever-growing competition in an ever-shrinking marketplace. How does one do this? In the following paragraphs we'll explore the new V.92 standard and how you can benefit from offering this service to your customer.

First, we need to fully understand the *V.92 Official Specification* from the ITU (International Telecommunications Union) and its feature set. The V.92 standard introduces the following three new features which adds speed and flexibility to your users:

- I. **Quick Connect.** With this feature the V.92 modem maintains a profile of a dial-up connection. When making the same dial-up connection, the modem will remember the specific line conditions to the ISP to eliminate going through the complete training sequence. This greatly reduces the connection time from approximately 20 seconds to about 10 seconds via V.92 equipped modems.
- II. **Modem-On-Hold.** Enables you to receive an incoming call and stay connected to the Internet (call waiting feature from your telephone company is the only requirement for this feature). It also works in reverse; you can initiate a voice call while connected and keep the modem connected. This feature allows the modem connection to survive a call-waiting event, even if you do not answer the incoming call.
- III. **PCM Upstream.** This feature boosts the upstream data rates from 33.6 kbps to 48 kbps between the user and the ISP and reduce the upload times for large files and e-mail attachments.

## As an ISP, you select which features you want to support

The new modem standard provides the ISP's supporting this standard a speed-to-market advantage against the competition allowing the leaders to gain critical market mass and revenue via increased functionality to the end-user. As an ISP supporting this standard you gain a competitive advantage but also keep your existing customers happier. With many people still not having access to broadband technologies such as DSL and Cable modems 55% of the Internet users will still connect via dial-up services. V.92 provides a competitive analog modem solution to compete with the broadband technologies that are all the rage today. With faster line negotiation, high upstream data rates, and more effective line usage via modem on-hold functionality will offer compelling benefits to your customers.



## How can I use the V.92 standard as a business resource?

The ability to provide a *Value-Added* service for your existing customer base helps circumvent the unavoidable "Churn" associated with running an ISP. You now have the ability to offer real cost savings to your users by reducing the cost of multiple telephone lines currently required to support simultaneous voice and data connections. Here is how the features improve your customer's experience. **Modem-on-Hold** allows user's to eliminate the costly second telephone line and the ability to be on-line while receiving incoming and/or make out going calls. **PCM Upstream** allows the Home-business user the ability to increase the upstream speed to 48 kbps from 33.6 kbps making transfer of large files faster and easier to manage. **Quick Connect** dramatically improves how quickly users can connect with their ISPs. In some cases quick connect will approximately halve the time required for dial-up modem to make the "handshake" with the ISP on regularly used connections. These features represent the next evolution in dial-up connectivity by focusing on the user experience primarily not on the technical enhancements.

## Your V.92 Resource Center

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