Samba history and basics

It has bothered me slightly over the last few months that John Vanags has asked around for newsletter contributions, but I've not thought of anything I could write about. You can almost hear the sobbing when he asks for submissions. (*Not quite, just disappointment - Ed*). Anyway, at the last meeting I noticed one or two rather bewildered looks during the RISC OS Samba server presentation, so I thought I could start by sticking my oar in here.

In my long and dirty history of messing with computers, I've found that if I know the basics on how something works, it often makes it much easier to understand why something should be setup as it is, and makes "feeling my way around" considerably less daunting. So, if I lay down a bit of background to Samba (which would have been quite boring if they'd gone through it all at the meeting) I hope you'll begin to understand why Chris and Matt were doing what they were doing.

For starters, it would probably help if you knew about "client/server architecture". This is just the technical-bod way of describing how two computers relate to each other in network communication. It's as much a philosophy as anything else - a way for the user to understand the structure of the system. It describes the roles that the computers take.

Put simply: the **server** provides the service. The **client** uses that service.

This is a common theme right through the world of networking and the Internet. When you browse a web page, your browser is a web page **client**, talking to a machine acting as a web page **server**. When you check your mail, your computer is acting as an e-mail **client**, communicating with an e-mail **server**. And so on. Being able to talk about clients and servers and LANs all day is one of the many reasons why computer geeks never get invited to parties.

Meanwhile, back at the plot ...

Many moons ago, Microsoft devised a protocol to allow networked Windows machines to share files and printers. This protocol was named SMB, or Server Message Block. Now, with reference back to the client/server stuff: when you "share-out" a folder on your Windows PC, you are activating an SMB **server** on that machine. And when you open "Network Neighbourhood", find a computer listed there, and start accessing files on it, you are utilising an SMB **client**.

But how does SMB relate to the non-Microsoft computing world? Well, around 1992-ish, a geek named Andrew Tridgell developed a piece of software which would make his UNIX computer appear to be just another Windows machine on his LAN, so that he could move files between operating systems and share his wife's printer. He named this software "Samba", which was just a word he liked which had the letters S, M and B in it. So: *Samba is a free version of SMB*. This software has now been ported over to pretty-much every computer OS imaginable, and comes to the RISC OS community as SmbServer (the server side - to allow your RISC OS machine to provide files for other machines) and OmniClient or LanMan98 (clients - to allow you to access files on machines elsewhere).

So, as far as transferring data between RISC OS and Windows is concerned, you have two choices. You can setup your PC as the server, and use OmniClient or LanMan98 to move files about, or you can setup your RISC OS machine with SmbServer and use Network Neighbourhood to move files about.

But which way is best?

When the more technical members of DARC first presented Windows/RISC OS networking, the Windows machine was the server. And lets face it, just being able to smoothly move files (especially large ones) across your network is a marvellous step forward, so who cares which way round you do it?

A very pertinent question came from a DARC member during the recent SmbServer presentation: "I already have it working one way, why do I need to

do this?"

The answer is: it depends on you, and your needs. If your PC is on more than your Acorn, or if your files spend most of their time in the PC, or if you have lots of free harddisk space in your PC, then keep your PC as the server. However, you must also own a copy of OmniClient or LanMan98. But if you think that it would make more sense to keep files on your Acorn then have your Acorn as the server. Plus, SmbServer is free!

If in doubt, consider that it is entirely possible to do both! Just as you can share-out files on your PC and still use Network Neighbourhood to access other machines, it' s perfectly possible to run SmbServer to share-out files on your Acorn, and still access other computers with OmniClient or LanMan98.

Useful Links

http://www.samba.org/

This is where the latest version of Samba is made available. The code itself will probably not be immediately useful to you, but the site does contain a lot of documentation, including good introductory articles. Certainly, more accurate than the potted-summary I' ve presented here.

http://riscossmbserver.sourceforge.net/

This is the RISC OS port of the Samba Serv.