

Erik Stevenson

From: johnlu
To: bradsj; jimal; paulma
Cc: bobmu
Subject: RE: Network strategy and NCP
Date: Wednesday, January 05, 1994 7:18AM

we too want to have a substantial position in the network business. but co-existence seems to be a better route to that position than the creation of alternative non-coexisting technologies. novell does have 70% of the market, i haven't seen a business plan from anyone where that changes substantially over the next 5 years.

so given this, i want our client to be a natural thing to buy for this 70% of the market, so i want to do a great job co-existing with netware and enhancing the client side of netware so that these customers have a strong reason to buy. if we can establish the ms client as the natural network client to install on all nets, then we have made a big step up. we have strong competition in this area -- novell is serious about PNW, they have added quality people to the team (Kyle Powell), they want to kill our network client and establish their own as the standard Windows Network desktop. We are in a position of strength here, WFW is outselling PNW, we need to grow this lead. This implies being a better NW client than PNW.

from this base we can then provide extended functionality and extend the protocols as needed. i don't understand why we wouldn't use extended ncp's for our extensions -- it makes it that much easier for 70% of the market to use our extensions. i don't think file system protocols are a strategic technology -- they are just a technology that we should use or discard as it makes engineering sense. what is strategic is the quality of our client and server implementations -- ease of use for users and admins, robustness, scalability, performance. file system protocol has no measurable impact on these metrics -- we have yet to identify a distinctive advantage of NCPs that we cannot achieve in SMBs or vice versa.

i think we should pursue similar tactics on the server side -- build a great server that is compatible with the largest part of the market, and then provide extended functionality on top of that.

i don't think we have done a very good job of analyzing the competition in this debate. at this point, novell is quite aware of all our plans for cairo and chicago. we have to assume that they are going to provide a system that they will represent as having the same capabilities as cairo. i wonder how easy that system will be to trial and deploy in real customer nets -- i suspect that on our current path, it will be easier to deploy the novell solution in an existing netware net than it will be to deploy the cairo solution. and i suspect the immediate tangible benefits of the novell solution to a netware user will be greater than the immediate tangible benefits of the cairo solution. for these reasons, i also think we need to be more netware compatible than we are today.

finally, i worry a great deal about novell's continued growth in the ncp file server business. their continued unopposed dominance of this business gives them an incredible amount of cash with which they are funding their entry into every other part of our business. i think a more direct attack on this cash flow would be welcomed by customers, lucrative for us, and would lessen novell's ability to fund other investments.

it is pretty clear we are not coming to closure on this. i'm no longer

convinced it is appropriate to come to closure. perhaps we need two distinct efforts -- one effort to provide very netware-compatible systems, and one to provide an alternative. lowering our risk by placing 2 bets against our largest threat doesn't seem like a terrible thing, in fact it seems like a time-honored microsoft strategy.

From: Jim Allchin
To: bradsi; johnlu; paulma
Cc: bobmu
Subject: FW: Network strategy and NCP
Date: Tuesday, January 04, 1994 7:18PM

I know bob didn't expect me to forward this private piece of mail, but I agree with the major points he included and I thought others should see this. (Bob, forgive me.) Above and beyond the NCP issue, I wanted to point out the critical importance of synergy of the systems products. They have to be "made for each other".

NBU made two major mistakes (1) trying to ignore the compatibility aspect that is required with a competitor that owns 50-60% of the market and (2) simply copying Novell and not offering any real value add. We won't make those mistakes again. However, we could make another very bad mistake by enhancing NetWare networks with our clients. We should not do this. It is a fine line (compatibility vs. enhance), however we should focus on making Chicago and Daytona&Cairo work better than Chicago and Novell. I'm not saying that the UI shouldn't be improved, but I am saying that much more focus should be put into making our systems seamless together. If we don't do this, then we not using the strength of being in the same company.

One of (the?) largest new business area within MS is the server business. It is clear that tight integration with the client is required to win. It's no different than our apps in Office. Sure our apps will work with other apps, but they sure work better if they are our apps. (Maybe Lotus is a better example here, I don't know.)

jim

From: Bob Muglia
To: Jim Allchin
Subject: Network strategy and NCP
Date: Saturday, January 01, 1994 1:06PM
Priority: High

Jim, I haven't been involved in the detailed discussions on this issue so maybe this is totally obvious. But then again... I marked this high-priority because I think it's worth reading and I know what your email queue is like.

It's very clear that personal and corporate systems are out-of-sync on whether we develop future enhancements based on NCP or SMB. It is also totally clear that we MUST get in-sync. What is not as clear is WHY we're pursuing different paths. This issue is not about manpower or client memory size, it is about strategy.

Fundamentally, there are two possible networking business strategies we can pursue - co-existence or ownership. Everybody agrees that

networking today equals Novell. The question is, do we accept this and assume it will remain true for the foreseeable future, or is it our STRATEGY to change that? If we are pursuing an ownership strategy, then we need to take appropriate steps NOW. We need to use every weapon at our disposal to take them out.

Clearly, I view it as my job to increase our network market share and replace Novell wherever possible. Eventually, I want MS to have 70%+ market share. However, I don't think there is universal agreement that this is a practical plan.

If we believed that Novell will continue to dominate the networking world in the foreseeable future, then we would need to focus on maintaining our client franchise while building a profitable business selling server solutions into Novell environments.

In this model (co-existence), our client-side networking effort would be primarily focused on making sure that we have great connectivity into Novell servers. We would need to expend this energy because our Windows franchise depends on Novell connectivity and we cannot rely on Novell. Since we assume it will be a Novell world, we must clone all of their features to ensure we remain competitive. In many ways, we really don't care whether customers use our software or Novell's to connect to their Netware servers - we just want to make sure the connectivity is there. We would also focus on cloning their API, again just to make sure our clients work great in a Novell environment.

Since all customers use Novell, when we add networking features we need to make sure they work great with Novell servers. Chicago point and print support on Novell print servers is good example of this. Clearly, SMBs are irrelevant and we should just adopt NCP.

On the server side in a co-existence world, our focus would be to add value into Novell networks. NT SQL Server with Novell clients is a great example of this. Further, if we really believed that co-existence was our destiny, then Cairo is not properly focused. Cairo would be thought of as additional services for Novell networks. For example, it would be important to content-index Novell servers. Also, our whole directory plans would be in question - why bother when NW 4 will be installed in almost every customer site? Instead, we would focus on adding value to NW 4 installations.

On the other hand, if our focus is to own the networking business, then we would do things very differently. We need to do everything we can to encourage customers to buy MS networking software instead of Novell. The key points:

1. Own the API and get ISVs to write to it. This is the first rule in systems software. If Novell loses control of the application API, then our ability to displace them in installations is vastly improved.

Interestingly, Novell is weak on this point. Although they are pursuing a similar strategy with Appware, we are in a stronger position with our Windows run-rate and our strong relationship with ISVs. We can use our NW clients to get MS software installed in a large percentage of customer systems. When our software is running, we can add APIs. If these APIs are attractive to ISVs - say they are cross-NOS instead of Novell specific, we can get ISVs to write to them. Specifically, I suggest we add Win32 WOSA APIs in areas which we currently don't cover. Administration is one good example.

Even on the server side, Novell has weaknesses we can exploit. NLMs are hard to write and they have a confused strategy wrt Unixware. All

we really need to do here is continue our evangelism effort to get server apps written for NT.

2. Leverage Windows to differentiate MS Networking software. When we add new networking features for which Novell has no native services, we should focus on making them work on MS networks. If Novell catches up and adds support, then we can add support for Novell. A perfect example of this is point and print support in Chicago. NT already supports this, there is no equivalent concept in Novell print servers. When Chicago ships, this should only work on NT and Chicago systems. Other examples are only supporting content indexing of OFS drives and only supporting catalog storage on OFS volumes.

To be clear, I am not suggesting crippling Novell installations. If Novell supports a feature - for example, long filenames or authentication, then we should support it. My point is lets not go out of our way to make things work on Novell. Instead, lets use these cool new features to give customers REASONS to buy MS software on the network.

3. Interoperate, make migration easy. Our network clients need to support all of the Novell features our customers demand. They need to be as good or better than the ones Novell provides so that customers have no motivation to install Novell's client. We need to make it easy for customers to migrate from Novell servers to NT AS. We need to use terminology which is familiar to Netware administrators. We have not done a great job on this in the past but we are now focused on these issues.

We should also take advantage of tactical opportunities to install our server solutions into Netware networks. This can provide a foot in the door for further sales.

4. Equal Novell in performance, add features they cannot easily match. No surprise here. This is our plan with Daytona and Cairo.

5. Establish a strong channel. We can't win without doing this, however it is a separate topic.

If we are on an ownership strategy, should our file protocol be NCP or SMB? I contend that if we are to gain control of the networking business, each major component must be either owned by MS or an open standard. Transport stacks are critical components but we have decided to focus on industry standard protocols which are widely used (IPX and TCP). If NCP was an open standard, then we could consider using it as our file-level protocol. However, it most definitely is not. It is clearly proprietary to Novell and is thus controlled by Novell.

Since Novell controls NCP outright today, we cannot hope to "own" it in the future. The best we could hope for is that it becomes an open standard. Yet, this too is a long-shot. I think this is analogous to Sun's attempt to make the Windows API an open standard. Any attempt we make to change NCP into an open standard will fail for the same reason Sun will fail with Windows - Novell can (will) choose to pay no attention to the standard and will implement new features which continually leave us behind.

Because I believe that we are on an ownership strategy and because we need to control our own destiny, we should consider SMB our strategic protocol and should base new features on SMB. We still need to implement NCP for compatibility purposes but we should not consider it strategic.

bob