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CO₂ Impact Statement

CloudWare Pty Ltd & the CloudWare VoIP Software Suite

Overview

The telecommunications industry has undergone a revolution in recent years with the move towards VoIP and ICT 'convergence'. In general the shift is towards a more software-centric model. However many of the incumbent vendors are still very much hardware-centric in their approach to VoIP, still producing dedicated, proprietary hardware on which to run their VoIP applications. In an increasingly environmentally aware market customers are now demanding a greener choice for their ICT purchases placing pressure on vendors to 'do better'.

The CloudWare Approach

As the name implies, the CloudWare VoIP Suite of software is designed to run 'in the Cloud' whether that happens to be a 'private Cloud' (LAN or WAN) or 'public Cloud' over the Internet to Data Centres via VPN for example. Another implication of this is 'virtualisation'; the CloudWare Server supports any number of 'Virtual PBXs' divided between the User Ports per server configuration limit (e.g. 100,000), eliminating the requirement for local physical servers in multi-site enterprises – remote or distributed sites can be supported as virtual VoIP PBXs. Each physical server removed represents a reduction of approximately 3.35 tonnes of CO₂ emissions per annum – assuming a four year service life (ref: Australian Computer Society).

Developed as a Windows Software application in Melbourne, Australia the CloudWare VoIP Suite runs on standards based network architecture, Windows servers and Operating Systems and uses the SIP standard to interoperate with any SIP compliant phones, equipment or carrier services. There are no proprietary hardware components required – CloudWare can be described as truly 'hardware independent'.

As a result, when calculating the CO₂ impact of the company, its software and its deployed on-site operation there is no inventory cost, no storage, shipping or transport cost and no manufacturing overhead to take into account. CloudWare is the only Australian developed and owned carrier class/enterprise VoIP platform, and no other vendor at this level can achieve such a low CO₂ impact due to their reliance on proprietary hardware with all that entails.

The following table references 'The Carbon Reduction Institute' for carbon calculation and offset values in the State of Victoria, Australia.

CO₂ Impact

System Deployment Impact (based on example of 200 users)	Annual CO ₂ Tonnes	Offset Cost
Fujitsu Primergy Server Model TX-120	1.7	\$37.24
¹ CloudWare VoIP SoftPhone talk time avg ² 90 mins/day	0.10	\$2.20
³ Polycom IP-430 SIP Phone idling	7.2	\$157.76
³ Polycom IP-430 SIP Phone talk time avg ² 90 mins/day	0.12	\$2.63
Est. CO₂ cost of CloudWare Enterprise VoIP platform for 200 users:	9.12	\$162.59

¹Ref: Power consumption of Plantronics CS60 Headset @ 0.6W.

²Ref: Nortel Study: 'Nortel on Nortel: Green IT: VoIP Consolidation in Small Offices'

³Ref: Polycom IP-430 power consumption specs @ 3W idle, 3.8W in a call.

The net carbon impact per user in this example with an on-site server is 99 cents per annum, however in the 'Cloud' model the impact of the server is shared across multiple sites and users. So on a CloudWare Hosting platform of 10,000 users for example; a 200 user Virtual PBX extension user's carbon impact would reduce to only 81 cents per annum.