

## Abacus Network Utilization

These are the major operations in Abacus that involve network traffic. Abacus generates lowest amount network traffic among different tracking softwares available in the market.

Abacus Operation	Frequency	DataTransfer	For 250 Users
WorkStations request server for new project list.	Default is every 5 minutes This frequency can be changed b/w 1 min. to 4 hrs or more from Abacus Manager	*If new project list exists then size is approx. 500 KB	<b>**= 128 MB over period of 5 min</b>
		If no new list then size is approx. 512 bytes	<b>= 125 KB over period of 5 min</b>
Print Server adds detected print activity in Server	Whenever user prints	Size: 1 KB per print	<b>= 1 KB for each print job</b>
Server asks Workstation to popup the billing dialog	Whenever user prints	Size: 1 KB	<b>= 1 KB for each print job</b>
Workstation asks server for pending activity for which billing is pending	1. Whenever user prints 2. Whenever user restarts machine	If pending activity exists then 2 KB * number of activities pending	<b>= 2-4 KB for each print job</b>
		If no pending activity exists then 500 bytes.	<b>= 500 bytes for each restart, logon or manual by user</b>
Managing tracking devices b/w server and print server	One time or Whenever tracking need to start/stop, typically initial configuration	1 to 10 KB	<b>= 10 KB</b>
Miscellaneous Management	One time or when configuration	depends	-
User Favorites Management	Once when User Logon Add/Remove Favorites	Typical size is 1 KB – 100 KB	<b>= 1MB – 25MB max.</b>

- \* - Project list is available for client workstations to download whenever,
- a) projects, phases changed manually from abacus manager
  - b) as a result of automatic periodic import/syncing from customers accounting - db
  - c) device, media configuration changes in manager
  - d) add/remove users
  - e) set/change permissions (user access policies) to projects

\*\* - Typically size of Project list (referenced as Data Cache File in Abacus) is 250 KB.

For Example, at one Abacus customer location having **18,000 projects, 50,000 phases and 8,000 users, the size of the cache file is 1.2MB**