

Comparison of IPP SIX and Cloud Imaging Model Operations

| IPP Operation | Cloud Model Operation | |
|------------------------------|-------------------------|--|
| Acknowledge-Document | AcknowledgeDocument | same |
| Acknowledge-Job | AcknowledgeJob | same |
| Cancel-Subscription | ----- | |
| Create-Job-Subscriptions | ----- | |
| Create-Printer-Subscriptions | ----- | |
| Fetch-Document | FetchDocument | same |
| Fetch-Job | FetchJob | same |
| Get-Document-Attributes | ----- | |
| Get-Documents | ----- | |
| Get-Job-Attributes | ----- | |
| Get-Jobs | GetFetchableJobs | same |
| Get-Notifications | GetServiceNotifications | similar |
| Renew-Subscription | -- | |
| Set-Output-Device-Attributes | InitializeService | Similar functions. Initialize is done during System Registration |
| Update-Document-State | UpdateDocumentState | same |
| Update-Job-State | UpdateJobState | same |
| Update-Output-Device-State | UpdateServiceElements | Includes elements beyond state |
| Acknowledge-Identify-Printer | -- | Included in GetServiceNotifications |
| Reset-Fetchable-Jobs | SynchronizeJobsStates | similar |
| ----- | RegisterSystem | |
| ----- | DeregisterSystem | |
| ----- | UploadJobDocumentData | |
| ----- | UpdateSystemElements | |
| | GetTerminatedJobsStates | Supports synchronization |

SynchronizeJobsStates = The proxy communicates active jobs and their states to the Cloud, and terminated jobs retained in History.

GetTerminatedJobsStates = The proxy requests the Cloud Service to identify all jobs which have been terminated by an action other than from the Proxy.

Following table identifies action in response to SynchronizeJobsStates. Active Jobs from the Cloud viewpoint are jobs which have been acknowledged as being fetched (AcknowledgeJob received) but for which an UpdateJobState message indicating a Job termination state has not been received. Active Jobs from the Proxy viewpoint are jobs which have been acknowledged as being fetched (response to AcknowledgeJob received) but for which an UpdateJobState message indicating a Job termination state has not been sent.

Table 2 - Resolution of Disparate Job Fetch Status in Response to SynchronizeJobsStates

| Cloud Believes | Proxy Reports | Action |
|--------------------------|-------------------------|--|
| Job Fetched & Active | Job Listed | Job State determined by Local Service- see table below |
| Job Fetched & Active | Job Not Listed | Make job fetchable |
| Job Fetched & Not Active | Job Listed & Not Active | none |
| Job Fetched & Not Active | Job Not Listed | none |
| Job Fetched & Not Active | Job Listed & Active | Cloud reports error. Proxy Sends GetTerminatedJobsStates |
| Job Not Fetched | Job Listed | Cloud reports error |

Table 4 - Resolution of Disparate Job States

| Cloud Job State | Local Job State | Proxy Action | Final Local Job State |
|---|---|------------------------|------------------------------|
| | | | |
| Pending, PendingHeld, Processing, ProcessingStopped | Aborted, Canceled, Completed | UpdateJobState | Local Job State |
| Pending, PendingHeld, Processing, ProcessingStopped | Pending, PendingHeld, Processing, ProcessingStopped | UpdateJobState | Local Job State |
| Aborted, Canceled, Completed | anything | Change local Job State | Cloud Job State |
| | | | |