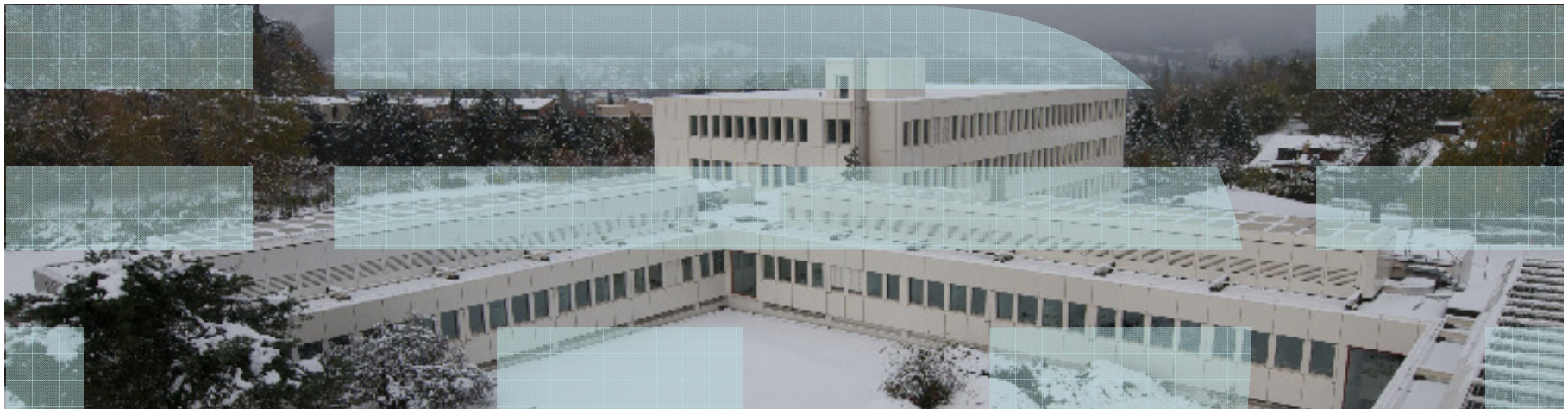


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## Server-to-server (s2s) in KMIPv1.1/v2 (status update)



## Outline

- Server-to-server (s2s) use cases (*presented at the KMIP f2f meeting*) and key functionalities needed
- Deficiencies of KMIPv1 for s2s
- Summary and possible actions in KMIPv1.1./v2

## Shortcomings of KMIPv1 and possible actions in KMIP v1.1./v2



Useful operations are optional (Notify, Put)

- KMIPv1.1/v2: make Notify and Put mandatory for a s2s compliant KMIP server



Bulk export/import can be only partially emulated (using batched operations)

- KMIPv1.1/v2: Need for “Get All Attributes” operation



The behavior of Put when Replaced Unique Identifier ruuid is specified, but the object with ruuid does not exist on the remote end needs to be specified

- KMIPv1.1/v2: Specify the behavior in the above case (**KMIPv1?**)



Notify does not support notification about deleted attributes

- KMIPv1.1/v2: Augment Notify to support attribute deletion notification (**KMIPv1?**).



KMIPv1.1/v2: More attributes are needed (e.g., Master, Slaves, Backup flag, Working server (denoting the origin of the backed-up objects))

• Other issues



- UUID, Name collisions across different servers
- Locate does not return an indication to the client whether there are more objects matching the query (nor the means to “resume” such a Locate)



– Cannot Locate all (**KMIPv1?**)

– Locate supports wildcards only for Name and Object group (**KMIPv1?**)

- This should be extended to other attributes represented as Strings (e.g., Application Specific ID)

## Additional concerns

- Server representation/registration (cf. client registration)

## Next steps summary

- Server representation/registration (cf. client registration)
- Define additional attributes
  - Master/Slave, Backup flag, Working server\*, ...
  - Interact with AC (e.g., Slave permissions)

\*attr names are provisional here
- Say something about UUID, Name collisions across servers
- Provide means to continue/resume a Locate
- *Examine the possible additional use-cases with a wider TC participation*