eVLBI refresher

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Intro

- General preparation for eVLBI
- eVLBI correlation
- FlexBuff data transfers

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Basics

- jive.eu/e-vlbi-station-recommendations
- Mattermost chat
 - URL: coms.evlbi.org
 - Username: <institute>.<name>

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dbbc proxy

- DBBC can only handle one socket at a time
- Commands from the FieldSystem and JIVE in eVLBI
- code.jive.eu/verkout/dbbc_proxy
- Advice, run on simple computer with 3 ethernet ports:
 - Direct connection to DBBC
 - FieldSystem
 - Public facing

Network

- Firewall
 - Open for TCP on dbbc_proxy port
 - Open for UDP on 2630 and 2631
- MTU, check switches are configured for 9000 bytes frames
- We are available for a network test.

Commands

- Drudge for eVLBI, prevent some commands
- dbbcform, check Astro patching mode
- vsi_bitmask, select bitstreams
- vsi_samplerate, set decimation
- VDIF configuration
- reset keepsync
- destination, configures the JIVE FlexBuff to send to
- start vdif

OUT	VSI1	VSI1	VSI1	VSI1	VSI1
CH	GEO	ASTRO	ASTRO2	WASTRO	LBA
CH	GEO	ASTRO	ASTRUZ	WASIKU	LBA
1	1US	1US	1US	1US	1US
2	1UM	1UM	1UM	1UM	1UM
3	2US	2US	2US	2US	2US
4	2UM	2UM	2UM	2UM	2UM
5	3US	3US	3US	3US	5US
6	3UM	3UM	3UM	3UM	5UM
7	4US	4US	4US	4US	6US
8	4UM	4UM	4UM	4UM	6UM
9	5US	5US	9US	5US	3US
10	5UM	5UM	9UM	5UM	3UM
11	6US	6US	10US	6US	4US
12	6UM	6UM	10UM	6UM	4UM
13	7US	7US	11US	7US	7US
14	7UM	7UM	11UM	7UM	7UM
15	8US	8US	12US	8US	8US
16	8UM	8UM	12UM	8UM	8UM
17	1LS	1LS	1LS	1LS	1LS
18	1LM	1LM	1LM	1LM	1LM
19	8LS	2LS	2LS	2LS	2LS
20	8LM	2LM	2LM	2LM	2LM
21	9US	3LS	3LS	3LS	5LS
22	9UM	3LM	3LM	3LM	5LM
23	10US	4LS	4LS	4LS	6LS
24	10UM	4LM	4LM	4LM	6LM
25	11US	5LS	9LS	5LS	3LS
26	11UM	5LM	9LM	5LM	3LM
27	12US	6LS	10LS	6LS	4LS
28	12UM	6LM	10LM	6LM	4LM
29	13US	7LS	11LS	7LS	7LS
30	13UM	7LM	11LM	7LM	7LM
31	14US	8LS	12LS	8LS	8LS
32	14UM	8LM	12LM	8LM	8LM

Timing

- Data stream continues in gaps
- Depends on correlator job selected
- No re-configuration for scans

Alternative connecting strategies

- Warning, don't go here unless forced
- Using shared memory of your FlexBuff
- No station configuration from JIVE

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Automatic FlexBuff transfers

- When experiments ends, check all flexbuffs for data, if not found on any stop searching
- So if recorded on an alternative unknown flexbuff and transferred later, please let us know
- .JIVE.allow
 - Polled at 1 min interval during transfer
 - If not found assume transfer is not allowed
- .JIVE.transferred

Automatic FlexBuff transfers (2)

- SSH access to the oper account
- Recording names:
 <experiment>_<station>_<scan>[_ds<data stream label>]
- jive5ab, shared with recording or separate instance
- Firewall
 - Open for TCP on jive5ab port
 - Open for bidirectional UDP on 2630 to 2640