

Equipment Installation and Cabling Services



Rack Layout and Design

- Floor and Rack Layouts (Visio / Autocad).
- Cable Management Systems (Vertical, Horizontal and Through).
- Containment and Management of Fiber Optic Cables in Mixed Rack Layouts
- Air Flow and Heat Management.
- Labeling Conventions and Colour Codes.
- Standardisation of Rack Layout and Parts Wherever Possible.

Power Distribution, Grounding and Fault Resilience

- Separation of Data and Power Cables.
- Correct Distribution of Power Feeds, Load Balancing and Phase Diversity.
- Individual Protection of Equipment during Fault Conditions.
- Correct Grounding and Earthing of Equipment and Racks.
- AC and DC Experience (Low and High Ohmic Systems).

Audit, Documentation, Test and Labeling

- Audit of Existing Systems Prior to Rework
- Documentation Update and Labeling of all Components and Cables (Data, Fibre, Power Etc.).
- Full Testing of all LAN / E1/ T1 Cabling (Return Loss, Cross Talk, Wire map, etc.).

Equipment Installation and Cabling

- Maximum Utilisation of Rack Space.
- Adequate Cable Management for Future Expansion and Upgrades.
- All Cables Custom Made to Length*.
- All Cables Marked at Both Ends with Originating and Terminating Destinations.
- Custom Solutions Available for Mixed and Small Footprint Racks.

* OnBoardComs does not splice fiber optic cables at the present time but on request is able to recommend several companies with proven track records in this area of expertise.

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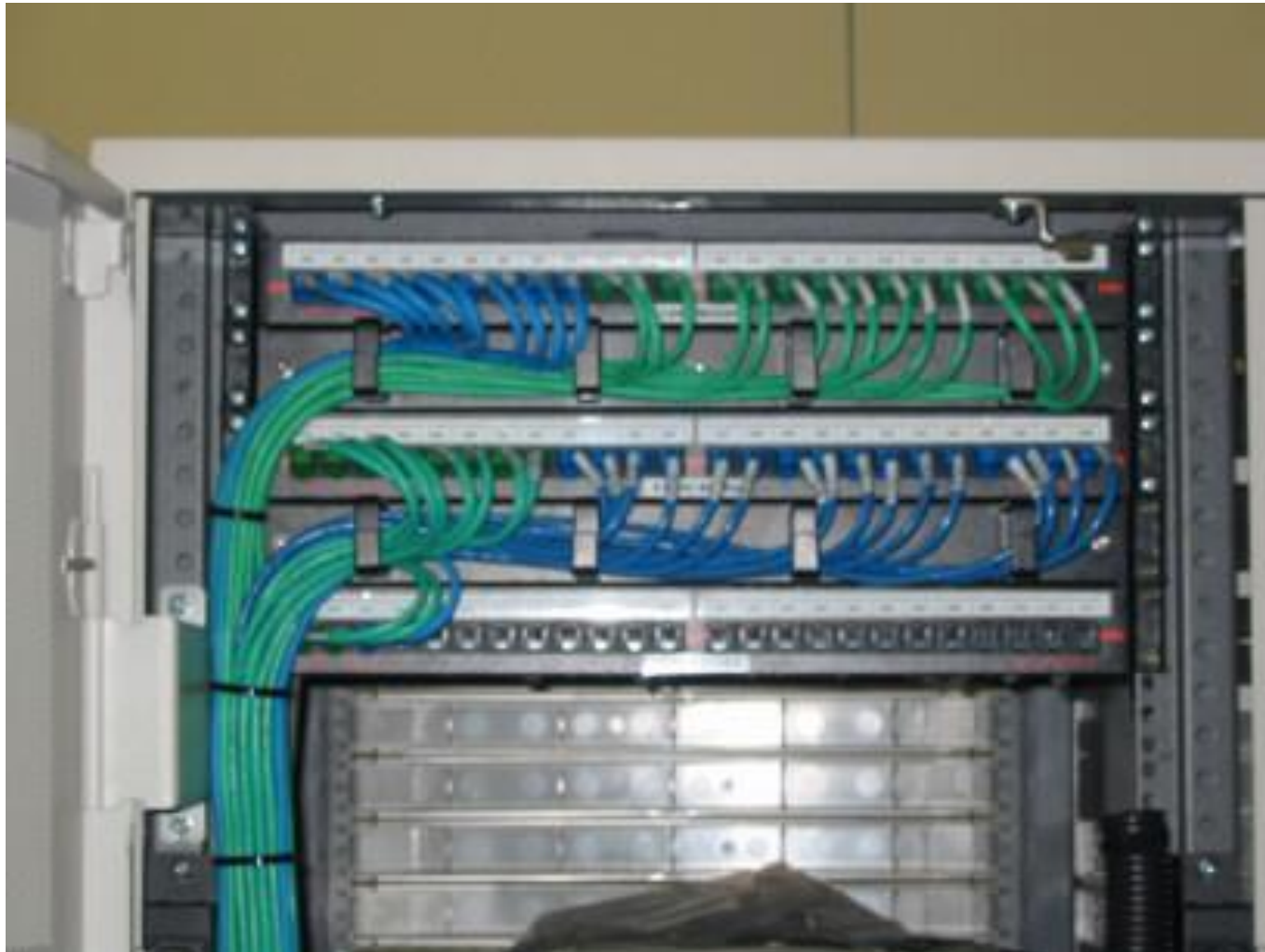


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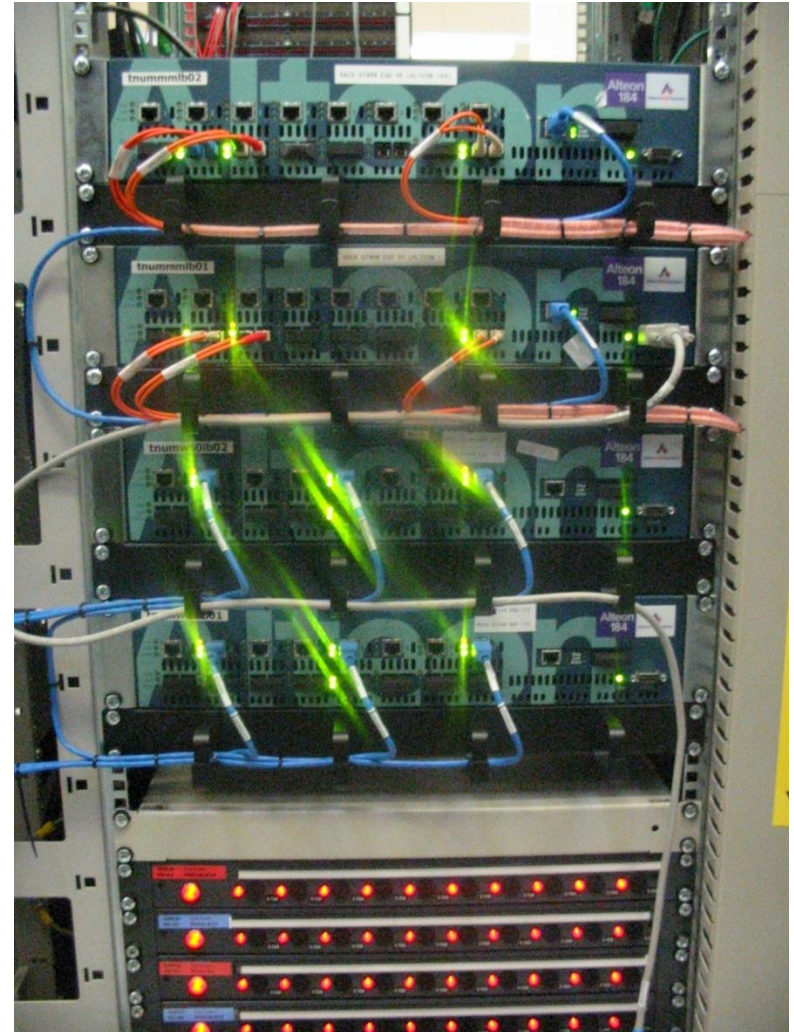
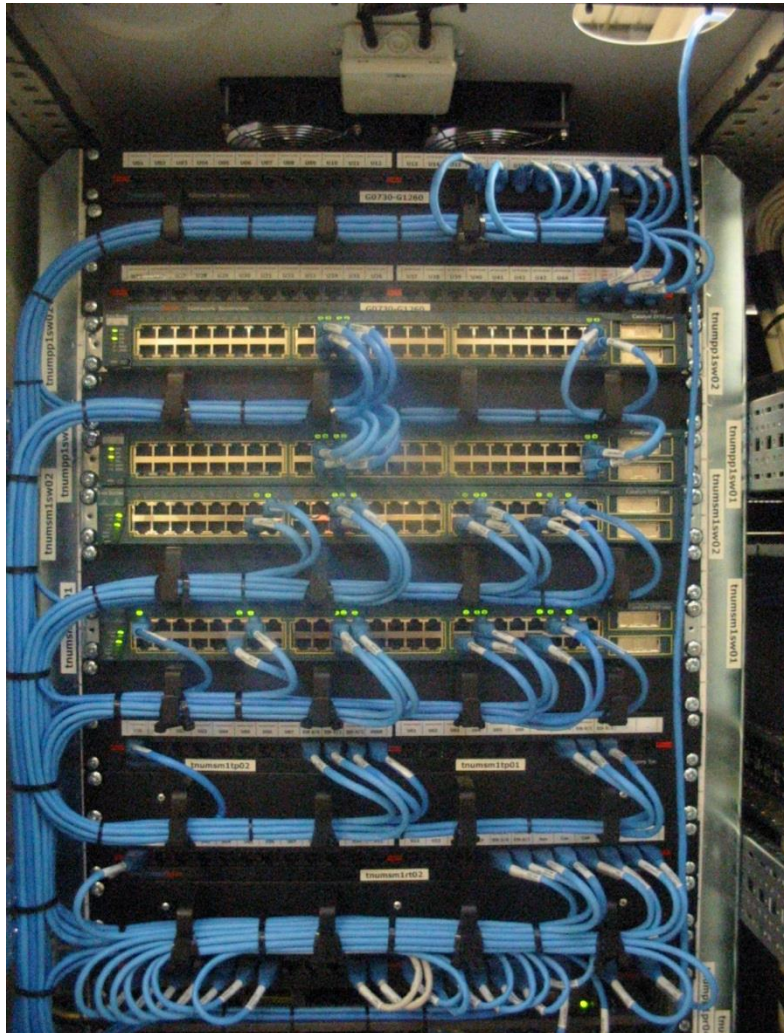
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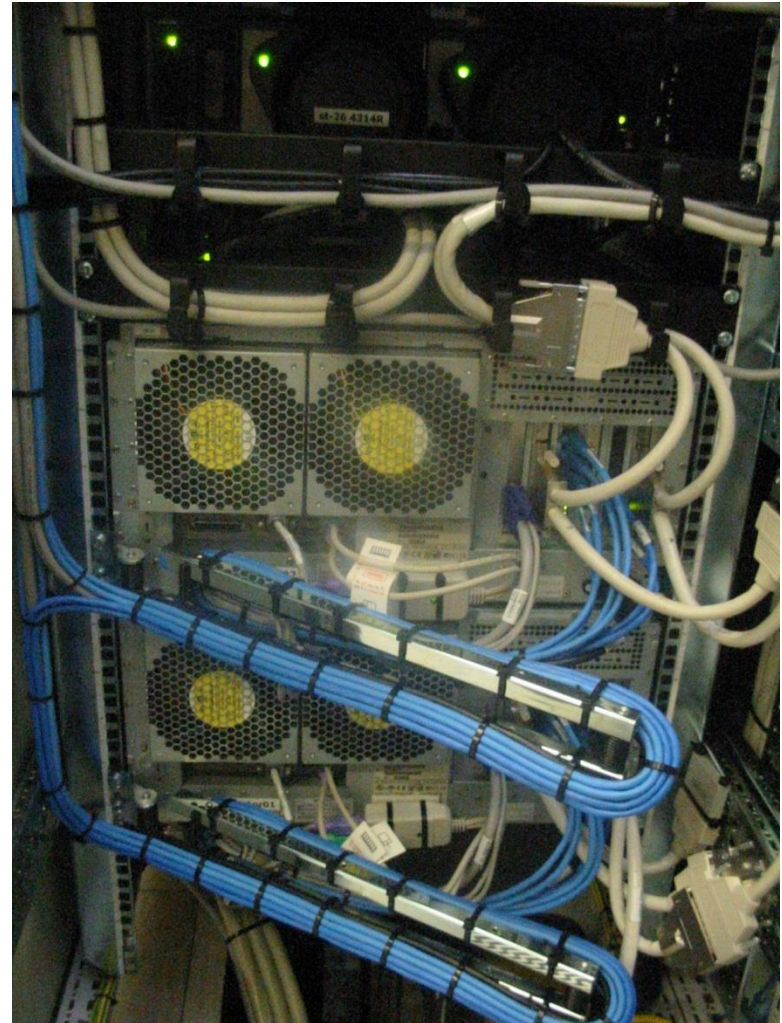
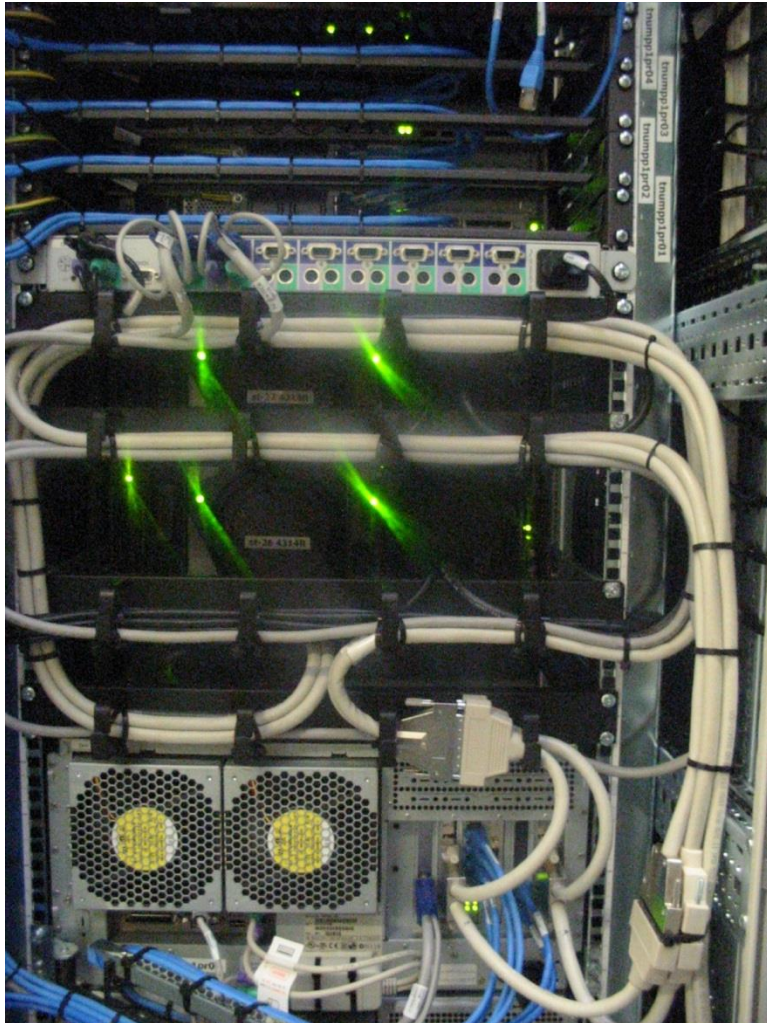
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Typical AC Power Distribution Plan

Cabinet Reference			Feed 1				Feed 2				Feed 3				Feed 4			
Location	Suite	Pos.	PDU	Phase	Breaker	Rating	PDU	Phase	Breaker	Rating	PDU	Phase	Breaker	Rating	PDU	Phase	Breaker	Rating
UNTESTED ERM UNTESTED ERM	A	0020	PDU2	B	17		PDU1	Y	19									
	A	0080	PDU1	B	17	32A					PDU1	R	18	32A				
	A	0140	PDU1	B	1	32A	PDU2	Y	16	32A	PDU1	R	17	32A	PDU2	R	16	32A
	A	0200	PDU1	B	16	32A	PDU1	Y	16	32A	PDU2	R	17	32A	PDU2	B	1	32A
	A	0260	PDU1	B	15	32A	PDU2	Y	17	32A	PDU2	R	2	32A	PDU1	R	2	32A
	A	0320	PDU2	B	14	32A	PDU2	Y	15	32A	PDU1	R	9	32A	PDU1	Y	17	32A
	A	0380	PDU1	B	18	32A	PDU2	Y	2	32A	PDU1	R	15	32A	PDU1	Y	2	32A
	A	0440	PDU1	B	2	32A	PDU1	Y	14	32A	PDU2	R	14	32A	PDU2	B	2	32A
	A	0500	PDU2	B	15	32A	PDU2	Y	14	32A	PDU1	R	16	32A	PDU1	Y	15	32A
	A	0560	PDU7	B	16		PDU8	Y	19		PDU7	R	3		PDU8	R	3	
	A	0640	PDU8	B	2		PDU7	Y	18		PDU8	R	21		PDU7	B	2	
	A	0720																
	A	0800	PDU8	B	11	16A	PDU7	Y	2	16A	PDU8	R	11	16A				
	A	0860	PDU7	B	11	16A	PDU8	Y	11	16A	PDU7	R	2	16A				
	A	0920	PDU7	B	14	16A	PDU8	Y	15	16A	PDU8	R	16	16A				
	A	0980	PDU7	B	1	16A					PDU7	R	17	16A	PDU8	B	1	16A
	A	1040	PDU8	B	15	16A	PDU7	Y	16	16A					PDU8	B	15	16A
	A																	
	A	1200					PDU8	Y	16	16A								

In the event of any planned power work the impact on each rack of equipment can be clearly assessed down to rack level. If necessary resolution down to individual equipment within each rack can also be provided

Example DC Power Allocation Sheet

PDC02					
SHELF A	TOTAL CURRENT DRAW 235A W/E 03/08/01				
RATING	BREAKER	EQUIPMENT		BREAKER	RATING
63 AMPS	CB1	MOMC (FEED A MSC1)	BSCB (FEED A 2G BSC)	CB7	63 AMPS
63 AMPS	CB2	VLR0 (FEED A MSC1)	TSM2E (FEED A 2G TRANSCODER)	CB8	63 AMPS
63 AMPS	CB3	GSW0 (FEED A MSC1)	SGAC (FEED A 2G SGSN)	CB9	63 AMPS
63 AMPS	CB4	GSW1 (FEED A MSC1)	SGBC (FEED A 2G SGSN)	CB10	63 AMPS
63 AMPS	CB5	ETC0 (FEED A MSC1)	VLRC 2 (FEED A MSC 1)	CB11	63 AMPS
63 AMPS	CB6	IWC (FEED A MSC1)	IPC (FEED A MSC 1)	CB12	63 AMPS
SHELF B	TOTAL CURRENT DRAW 222A W/E 03/08/01				
RATING	BREAKER	EQUIPMENT		BREAKER	RATING
63 AMPS	CB13	MOMC (FEED A MSC2)	VLRC 2 (FEED A MSC 2)	CB19	63 AMPS
63 AMPS	CB14	VLR0 (FEED A MSC2)	IPC (FEED A MSC 2)	CB20	63 AMPS
63 AMPS	CB15	GSW0 (FEED A MSC2)		CB21	63 AMPS
63 AMPS	CB16	GSW1 (FEED A MSC2)		CB22	63 AMPS
63 AMPS	CB17	ETC0 (FEED A MSC2)	Sync GPS UNIT (FEED A)	CB23	63 AMPS
63 AMPS	CB18	IWC (FEED A MSC2)	Sync SSU (FEED A)	CB24	63 AMPS
SHELF C	TOTAL CURRENT DRAW 222A W/E 03/08/01				
RATING	BREAKER	EQUIPMENT		BREAKER	RATING
63 AMPS	CB25	SOMC (FEED A SRRI)	IPC (FEED C MSC 1)	CB31	63 AMPS
63 AMPS	CB26	SCEC (FEED A SRRI)	IPC (FEED D MSC 2)	CB32	63 AMPS
63 AMPS	CB27	HLGC (FEED A HLR) 30/15A		CB33	63 AMPS
63 AMPS	CB28	HLRC (FEED A HLR) 30/15A		CB34	63 AMPS
6 AMPS	CB29	DSX (DDF SINGLE FEED ONLY)		CB35	63 AMPS
63 AMPS	CB30			CB36	63 AMPS
SHELF D	TOTAL CURRENT DRAW 240A W/E 03/08/01				
RATING	BREAKER	EQUIPMENT		BREAKER	RATING
100 AMPS	CB37	RNC1 (FEED A) 10/20A	RNC2 (FEED A)	CB41	100 AMPS
100 AMPS	CB38	MGW1 (FEED A)	RNC3 (FEED A)	CB42	100 AMPS
100 AMPS	CB39	Nokia Node B No.1 (SINGLE FED)	MGW3 (FEED A)	CB43	100 AMPS
125 AMPS	CB40	MGW2 (FEED A)	Nokia Node B No.3 (SINGLE FED)	CB44	125 AMPS

DC power feeds as viewed from a power distribution cabinet

(The yellow highlighted areas indicate allocations for planned installations)

How long would it take to locate and fix a fault on this equipment?

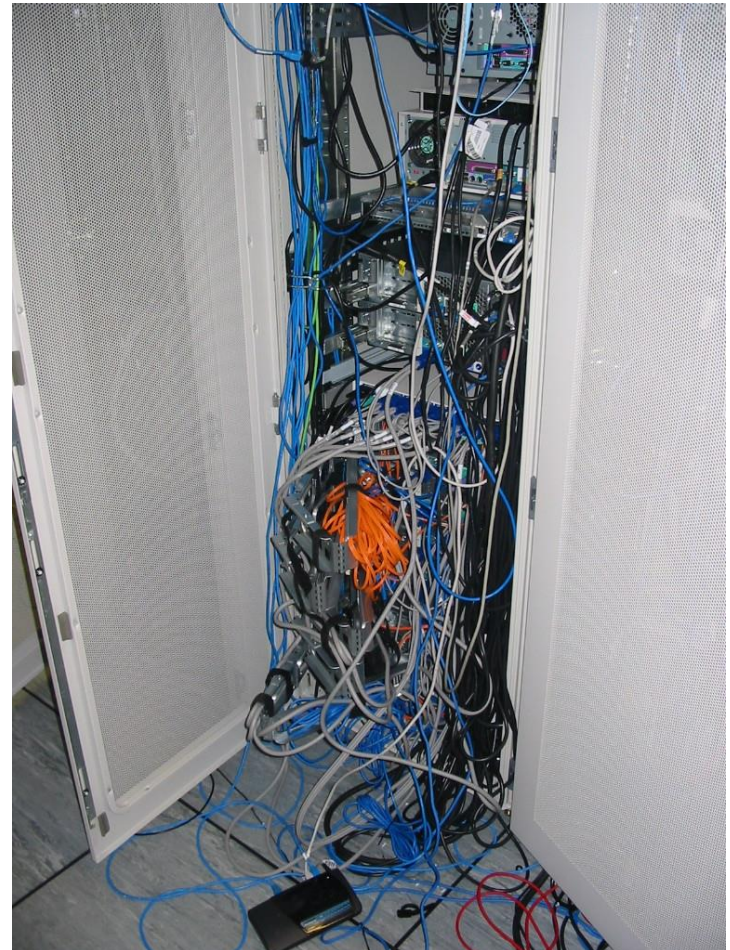
Can you really afford to find out?

OnBoardComs installs equipment to the highest possible standard, giving you:

- Less in-service down time
- Easier maintenance
- Faster fault finding

leading to:

- Greater revenue generating potential
- Reduced on-going operating costs
- Happier customers



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