

CANAL WALK^{CW}



Johannesburg | South Africa



SLIDES 101
SDG TECHNOLOGIES
Revolutionary Time -of-use RTU!
Changes any pulse meter into a TOU meter *
***also does water**



SDG has 25 man years Experience in Developing and Commissioning AMR and SCADA hardware and software.



The NEXT Generation of AMR

-  **More Reliable**
-  **More Powerful**
-  **More Affordable**



what is **AMR**?

Automatic Meter Reading



+

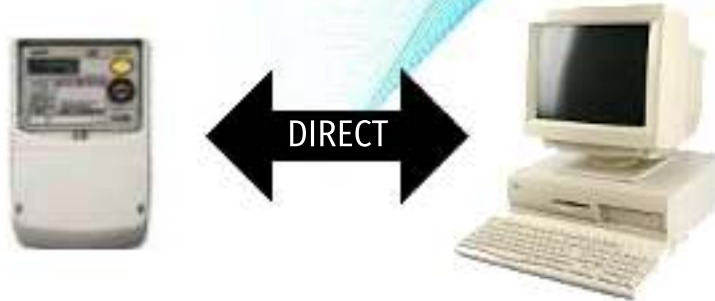


VS



PNPSCADA

The 1st Generation AMR System



Typically a Windows Program installed on a PC.



Meter Data Visible in REAL TIME!



Data inaccessible: Only exists on 1PC and too Technical in nature.



PNPSCADA

The 2nd Generation AMR System



Typically a thin client accessing a Web server

Data much more accessible!

Web Server publishes data to all users!

Billing Information incorporated, showing data in Rands and Cents



PNPSCADA

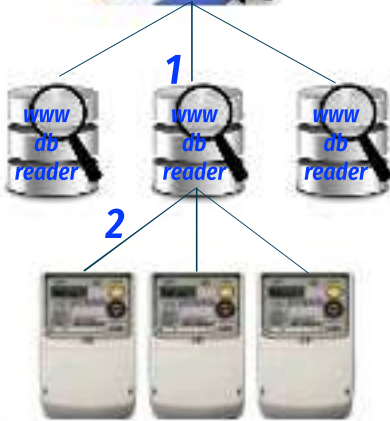


Unfortunately, Real Time Meter Data not available any more.

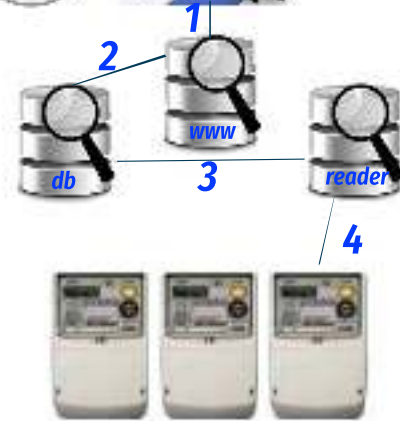
MORE POWERFUL

Scada Approach to AMR

FAST



SLOW



VS



PNPSCADA

What is AMI?

Advanced Metering Infrastructure



AMR Software



Communication



Meters



PNPSCADA

What is AMI?

Advanced Metering Infrastructure



AMR Software



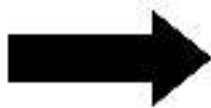
Communication



Meters



PNPSCADA



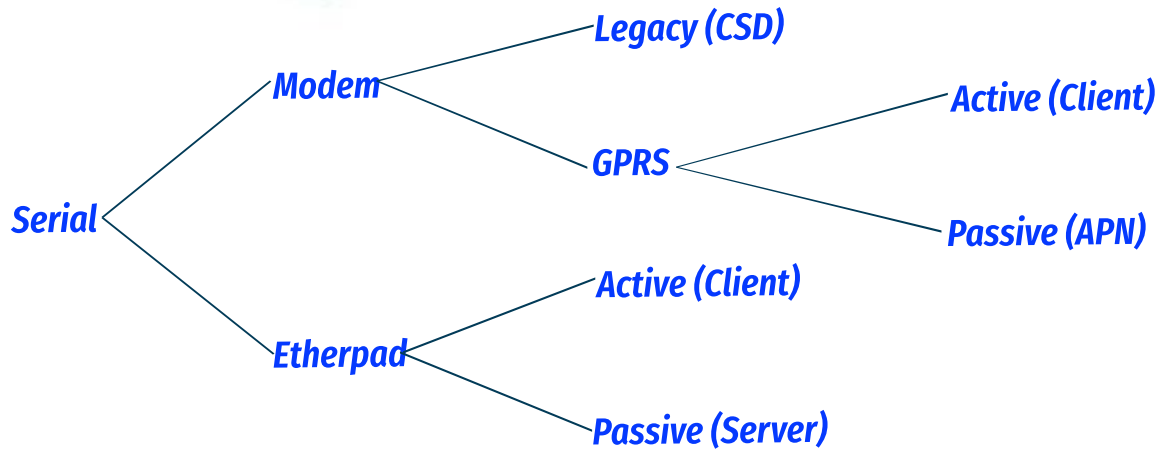
What is AMI?

Advanced Metering Infrastructure



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Five Main Communication Options



Tertiary Communication Options



RS232 (multi-drop, 10m)



RS485 (multi-drop, >1km)



RF Mesh (eg. Wavenis up to 4km)



Power Line Carrier (PLC)



Typical GPRS Topology

Proposed AMI Architecture

QUEENS COURT / BELVISTA / FERREIRA HOUSE



Plug and Play Scada
Client's own AMR Server on Site
@ Greenacres Office Park



Incoming Transformer Sub



GPRS

Communication Base



GPRS

Incoming Transformer Sub

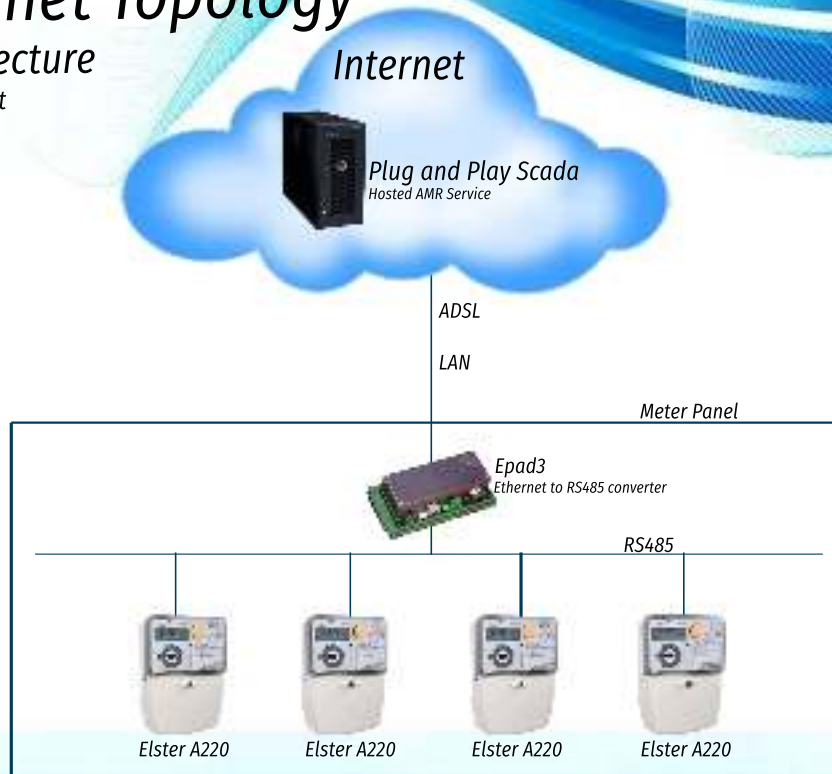


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Typical Ethernet Topology

Proposed AMI Architecture

option 1: A220 meters on Ethernet



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Provisional Purchase Order

Info Tec

26 Rankine Road East Mt.
P.O. Box 7178
Bridgewater, NJ 08801
Tel: 973 241 4012
Fax: 973 241 4001
Call: 888 327 3284
www.infotec.com

The following number must appear on all related correspondence, shipping papers, and invoices:
Provisional Purchase Order Number #50026908

TO:
Please give To:
S&S Technologies Inc
14 Parkside Lane
Basking Ridge NJ
08809
Tel: 908 498 4000
Fax: 908 498 3788

SHIP TO:
Please give To:
SmartTel
38 Rankine Road East
P.O. Box 7178
Bridgewater NJ
Tel: 973 241 4001
Fax: 973 241 4000
Call: 888 327 3284

PROVISIONAL PURCHASE ORDER

Generated on behalf of Info Tec, by S&S Technologies on 2012-07-23

Please sign and fax to S&S to submit order. This is a valid order only if the customer's signature appears at the bottom of this form. Alternatively, customer can generate Fax form order for the same items, if a subject of item. This process request however is valid for 2 weeks.

Once a valid order is received, an invoice will be issued. On payment of invoice, the order will be assembled, tested and shipped.

PO DATE	REQUESTOR	SHIPPED VIA	F.O.B. POINT	TERMS
2012-07-23	Info Tec	Carrier	Manufacturer - Shipping	Payment on Order

QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
2	Filter 41140	3 phase Filter for incoming	\$1,500.00	\$3,000.00
40	Filter 8128	Single phase TOU meter return	\$250.00	\$10,000.00
14	Filter 8125	Pressure (TOU) to S&S/SCOTI metering	\$1,346.43	\$18,850.00
1	Blowout	Blowout (PO) to 81222 connector	\$2,094.00	\$2,094.00
40	AMR 1 Year	Warranty for 1 meter returned over a year	\$218.25	\$8,730.00
2	Support Per Hour	Cost of labor & van accounts and supplies	\$300.00	\$600.00
			SUBTOTAL	\$25,274.00
			TAX (14%)	\$3,538.36
			CARRIER & TRANSPORT INSURANCE COSTS	\$360.70
			TOTAL	\$32,173.06

- Components ordered and shipped from S&S - including meters - will be accompanied with an on-site Plug and Play kit. Plug and Play accounts and the on-site and commissioning fee will be billed before shipment.
- Components not ordered or shipped from S&S will not be tested before shipment.
- Installation of communication equipment and meters - including on-site wiring of CT and VT wires into the meter - is the responsibility of the customer's party.
- Lead time on hardware orders are up to 3 weeks.

Authorized by _____

Date _____



PNPSCADA



- ✓ 1. *Pre-Configured Hardware*
- ✓ 2. *Correct cables*
- ✓ 3. *Pre-Configured Software*
- ✓ 4. *Plug and Play Solution*



PNPSCADA



**FREE
SUPPORT**

During office hours

010 003 1015
select option 1



Plug and Play Scada Curriculum:

SDG: AMR Induction

SDG: Technician - Installation of meters

SDG: Technician - Installation of communication (active GPRS modems)

SDG: Technician - Installation of communication (passive GPRS modems)

SDG: Technician - Installation of communication (CSD modems)

SDG: Technician - Installation of communication (Etherpads)

SDG: Technician - Installation and testing (RTU; Working with Pulses and Synchronising totals)

SDG: Technician - Installation and testing (Wavenis wireless Mesh)

SDG: Technician - Installation and testing (A100C Irda)

SDG: Accountant - Configuring tariffs and Time of Use Calendars and meter accounts

SDG: Accountant - Monthly billing runs and exporting bill to 3rd party systems

SDG: Admin - Configuring customer accounts and permissions

Elster: Wavenis wireless mesh - Hardware installation and Testing

Elster: Customer training for Power Master Unit meter programming software



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