



ljhba\h^bl_ev
R_^kdZy dhfiZgby
HMS Industrial Networks
(hl^_e_gtellicom)

Netbiter *

kbkl_fZ m^Ze_ggh]h mijZ\e_gby h[hjm^h\Zg

ÿü þîû ðþóú , ÿü þîû úóþñö , ÿü þîû þóý þÿ !!!

* lj_u^ms_gZaRZgdeCom

Netbiter – удаленное управление устройствами



```
>hfZ gZ jZ[hI_ \ dhfZg^bjh\d_
<u \k_]^Z kfh`_I_ hI\_Iblv gZ \r
```

```
DZdhc k_cqZk mjh\_gv
\_j_a_j\m?Zj_
```

```
K dZdhc kdhjhklvx
baf_gy_lky mjh\_gv"
```

M^Ze_gguc dhgljhev h[hjm^h\Zgby q_j_]
Ethernet bGSM/GPRS

```
DZdmx fhsgghklv
\_ujZ[Zlu\Z_I
]\_g_jZPhj
```

- H[_ki_qb\Z_lky ijyfhc ^hkلمي d ^Zgguf h
khklhygbb jZaebqgh]h h[hjm^h\Zgby \ Ihf
qbke_ b ihe_\uo mkljhckl\

```
GZ kdhev dh o\Zlbi
NiebZ
```

- H[kem`b\Zxsbc i_jkhgZe ihemqZ_I DZdmx
hi_jZlB\guc ^hkلمي d bgnhjZpbb h ijhp_kk
b Z\IhfZlBq_kdb hih_sZ_lky ijb Z\Zjbcguy
kbImZpbyo

```
ijhba\h^pl_evghklv
h[_ki_qb\Z_I
gZknkgy kZgppy
```

- Jmdh\h^kl\h kh[kl_ggbd ihemqZ_li_ijhklh cZPhl_
kihkh[m^Ze_ggh]h dhgljhey

```
KemqZebkv eb
hklh cZPhl_
```

KhkIZ\ kbkl_Netbiter

Ki_pbZebabh\Zgguc aZsbs_NetBiter.ketj_j

- MijZ\ e_gb_ ijh_dlhf

2. Ethernet- r e x a

- H[_ki_q_gb_ ^hklmiZ d ^Zgguf q_j_a ijh\h^gu_ k_l Ethernet b [_kijh\h^g GSM/ GPRS
- <kljh_gg Modbus Master ^ey ihemq_gby ^Zgguo hl \g_rgbo mklj Modbus Slave
- <kljh_ggu_ dZgZeu ZgZeh]h\h]h b ^bkdj_lgh]h \\h^Z \u\h^Z \ g_dhlhjuo fh^_eyo

Fh^meb \\h^Z \u\h^Z

- H[_ki_q_gb_ lj_[m_fh]h dhebq_kl\Z ZgZeh]h\uo b ^bkdj_lguo dZgZeh\ \\h^Z \u\h^Z gm`gh]h lbiZ

Общая проблема – Firewall (межсетевая защита)

- Firewall [ehdbjm_l ^hklmi ba
 \g_rgbo k_l_c

■ ВЕ^_iZjIZf_gjl_ ^ijbylby
 ^ey h[_ki_q_gby [_ahiZkghklb
 g_hldju\Z_l ^hklmi q_j_a
 Firewall...

■ « beb ijhp_kk gZkljhcdb
 aZgbfZ_l fgh]h \j_f_gb b kbe

Общая проблема – доступ через GPRS

- G_ba_klguc beb ^bgZfbq_kdbc
IP-Z^j_k
- Nbdkbjh\Zgguc im[IPbqguc
Z^j_klhbl ^hjh]h
- H[_ki_q_gvBN ^hklmiZ
klhbl ^hjh]h
- G_k_l_e_dhffmgbdZpbhggu_
ijh\Zc^_ju h[_ki_qb\Zxl
gZ^_`guc dZgZe i_j_^Zqb
^Zgguo
- Ki_pbZevSIM-dZjlM2M
^hjh]b





Решения Netbiter EasyConnect

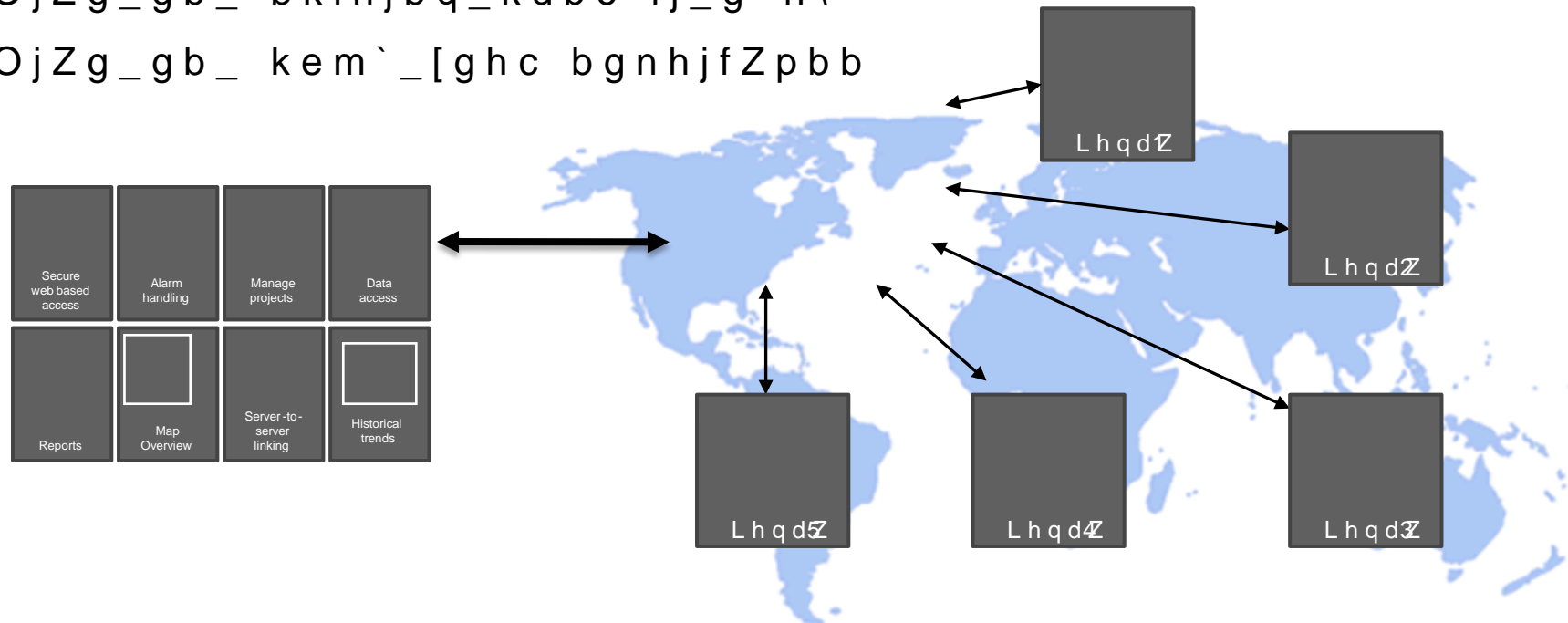
bkihevamxl mgbdzvngx l_ogheh]bx kha^Zgby aZsbs_ggh]h d

- ✓ DZgZe i_j_^Zqb ^Zgguo g_
[ehdbjm_lky f_`k_l_\ufb
wdjZgZ(Firewall)
- ✓ Nbdkbjh\Zgguc b im[ebqguc
IP-Z^j_g_lj_[m_lky
- ✓ G_l ihlj_[ghklb kha^Z\Zlv
VPN-lm gg_eb
- ✓ >eGPRS kh_^bg_gby fh`gh
bkihevah\Zlv h[SIMg u_
dZjlu

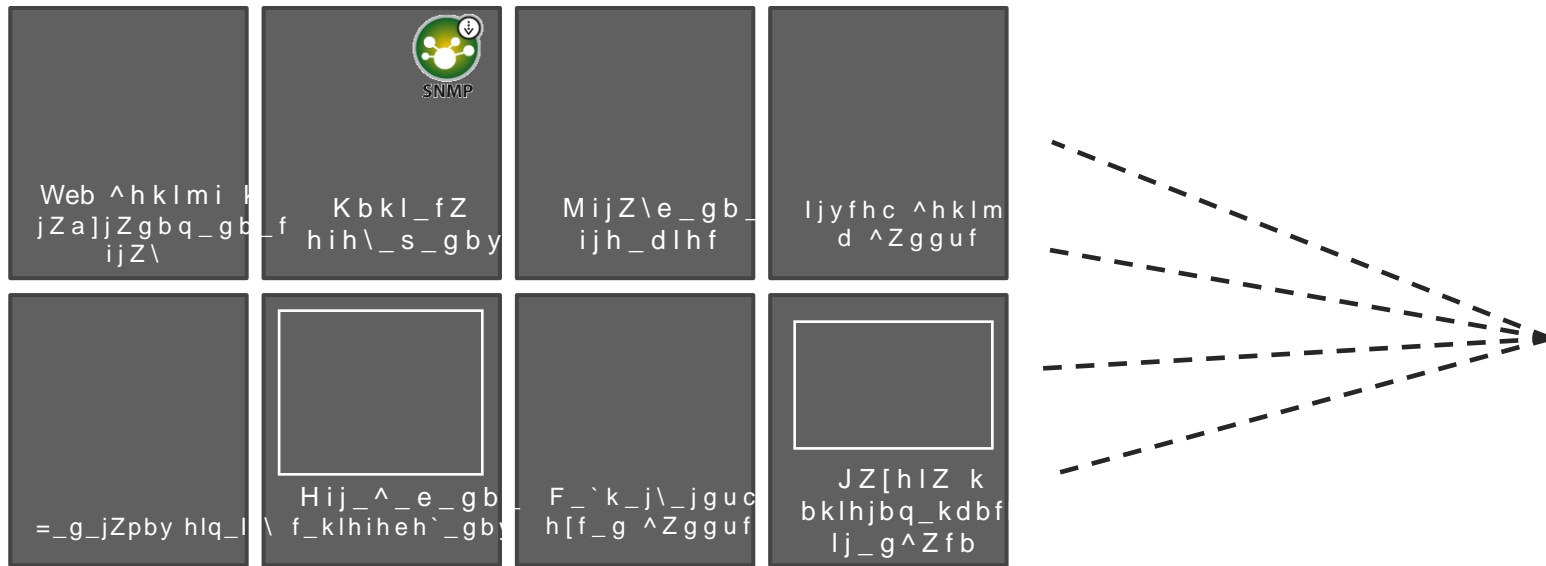
Общая проблема — очень распределенная система

A Z ^ Z q b

- H[_ki_q_gb_ ohjhr_c \bamZebaZpbb b [ukljh]h ^hklmiZ d ^ hl [hevrh]h dhebq_kl\Z bklhqgbdh\
- H[_ki_q_gb_ wnn_dlb\gh]h bkihevah\Zgby [hevrhc kbkl_fu
- Ijhklh_ dhgnb]mjbjh\Zgb_
- OjZg_gb_ bklhjbq_kdbo Ij_g^h\
- OjZg_gb_ kem`_[ghc bgnhjfZpbb



Решение – портал Netbiter® Argos



Web-ihjIZe h[_ki_qb\Z_l [_ki_j_[hcguc ^hklm
^ey fhgblhjbq]Z b mijZ\`e_gby m^Ze_ggufb r
[hevrhc gZ[hj k_j\bkguo nmgdpbc

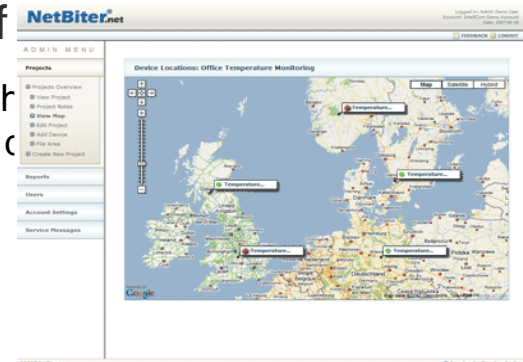
Fhgblhjb] b mijZ\e_gb_ h[hjm^h\Zgb_f

- AZsbs_gguc ^hklmi
- lZjhevgZy kbkl_fZ jZa]jZgbq_gby ijZ\
- GZkljZb\Z_fuc [ukljuc h[ahj \k_]h h[hjm^h\Zgby \ijh_dl_
- M^Ze_gguc ^hklmi d l_dmsbf ^Zgguf h[hjm^h\Zgby \hafh`ghklv ihkueZlv dhfZg^u mijZ\e_gby
- >he]h\j_f_ggh_ Zjob\gh_ ojZg_gb_ \Z`guo nZceh\ (j_a_j\gu_ d,hdh]nb]mjZpbhggu_ nZceu b ij

lhabpbhgjbh\Zgb_

jZ[hIZ k i_j_f_sZxsbfbk y h[t_dIZf

- Hij_^_e_gb_ dhhj^bgZI b mdZaZgb_ iheh dZd klZpbhgZjguo lZd b ih^b`guo h[t_c
- Geo-fencing- fhgblhjb] gZoh`^_gby h[t_dIZ \bjlmZevgh]h i_jbf_ljZ ijb i_j_k_q_gbb ijhbkoh^bl hih_s_gb_ ihevah\ZI_ey
- ljhklhc ^hklmi d ^Zgguf ih^b`guo mkljhcκκ\



K[hj b ojZg_gb_ ^Zgguo

- >he]h\j_f_ggh_ ojZg_gb_ Zjob\h\ ^Zgguo
- lj_^klZ\e_gb_ ^Zgguo \ m^h[ghf ^ey ZgZebaZ
]jZnbq_kdhf \b^_ lj_g^u
- Wdkihjl ^Zgguo \ jZaebqgu_ nhjfZlu
(gZijbf_ Excel)

Hlq_lu

- GZkljZb\Z_fu_ hlq_lu dhlhju_ Z\lhfZlbq_kdb
nhjfbjmxlky ih khklZ\e_gghfm jZkibkZgbx b
jZkkueZxlk E-mail
- Hlq_lu fh]ml kh^_j`Zlv kem`_[gu_
iZjZf_lju ^Zggu_ baf_j_gbc lj_\h`gu_
hih_s_gby \uoh^ aZ mjklZ\^u[u
k\yab b ij



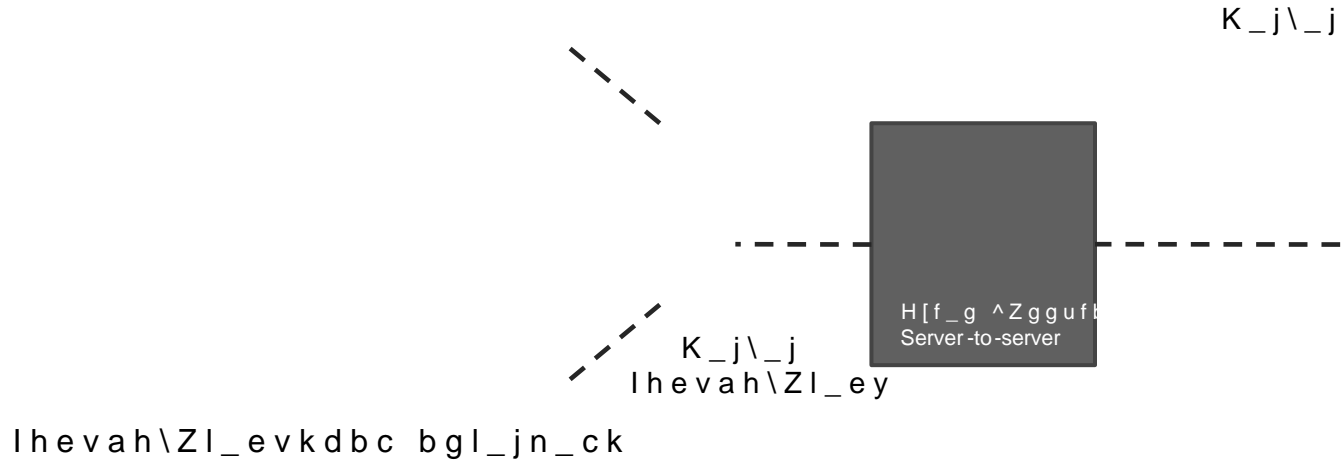
Lj_\h`gh_ hih_s_gb_

- >\Z lbiZ hih_s_gbc h[uqgu_ b k
h[yaZI_ev guf ih^l_j`^_gb_f ihemq_gby
- JZkkuedZ hih_s_gb_ SNMP, SMS be b-
mail
- <_^_gb_ Zjob\Z lj_\h`guo hih_s_gbc

F_`k_j_jguc h[f_g ^Zggufb

- Hkgh\Zg gZ klZg^Zjlghf SOAP dhe_
- >hklmi d ^Zgguf Netbiter® ^jm]bf
kbkl_fZf IZdbf dZd
 - Ihevah\ZI_e web/intranet k_j_j
 - Kbkl_fu mijZ\e_gby ij_^ijbylb_f
 - SCADA/HMI kbkl_fu
 - >jm]b_ ijh^mdlu bkihevamxs_b_ HJK
l_ogheh]bb
- l_j_^ZqZ k\h^hd ih ijRSS dhem

Сервер Пользователя



GZkljZb\Z_fZy KbkI_fZ

- K_j\j Netbiter h[_ki_qb\Z_l h[f_g ^Zggufb k k_j\jhf Ihevah\ZI_ey
- GZ k_j\j_ ihevah\ZI_ey ihemqZ_fu_ ^Zgg_u_ fh`gh h[jZ[Zlu\Zlv ex[uf kihkh[hf gZijbf_j ijb ihf(SCADA)
- H[_ki_qb\Z_lky kd\haghc dZgZe i_j_^Zqb ^Zgguo f_`^m ihe_\uf ^Zlqbdhf b kbkI_fhc _jog_]h mjh\gy



Rexa NetBiter



Netbiter® EC (EasyConnect)

- JZ[hIZ_l Ihev dh q_j_ Netbiter Argos ihevah\ZI_ev ihemqZ_l
^Zggg_u_g_ba rexaZ Z k k_j_jZ
- Mijhs_gguc ijhp_kk bgklZehyq b bZc_j\heh\ jZ[hIZ [_a
klZl bq_k PhZ h j_kZ b ij
- M^Ze_ggh_ dhgnb]mjbjh\Zgb_ b mijZ\e_gb_ ih k_lb
- K\yav h[_ki_qb\Z_lky qEthernet GPRS
- <kljh_gguc gZ[hj dZgZeh\ ^bkdj_lgh]h b ZgZeh]h\h]h \h^Z \u\h^Z
jZkrbj_gb_ q_j_a \Modbus fh^m eb << rexa jZ[hIZ_l dZd
Modbus Master)

Netbiter® WS (WebSCADA)

- <kljh_gguc web-k_j_j h[_ki_qb\Z_l ^hklmi d ^Zgguf \ iZfyIb rexaZ
- :job\u ^Zgguo b lj_\h] fh]ml ^m[ebjh\Z Netbiter Zgs_j_j_
- Dhgnb]mjbjh\Zgb_ ijhba\h^b lky ehdZevgh
- K\yav h[_ki_qb\Z_lky qEthernet GPRS beb q_j_a \g_rgbc
ZgZeh]h\uc fh^_f
- <kljh_gguc Modbus Master ^ey ih^dexq_gby \g_rgbo fh^me_c << b
^jm]bo mkljhckl\

Netbiter® I/O Extender

- IOX-DAIO (4 × DI, 2 × DO, 2 × AI(V, mA), 1 × AO(V, mA), 1 × RTD)
- IOX-8DIO (8 × Digital Input and 8 × Digital Output)
- IOX-4RO (4 × Relay Outputs)
- IOX-6RTD (6 × RTD PT100/1000 or Ni120/1000 2/3 wire)
- IOX-8AIV (8 × Analog 0-10 V Inputs)
- IOX-8AIIS (8 × Analog isolated 0-20 mA current Inputs)



GPS- k _ g k h j

- lh^dexqZ_lky d reXam ^ey lhqgh]h hij_^
l_dms_]h f_klhiheh`_gby mkljhckl\Z

<g_rgyy Zgl_ggZ k dZ[_e_f

- lha\hey_l jZaf_klblv Zgl_ggm \ m^h[ghf f_kl_ k
emqrbf mjh\g_f kb]gZeZ

M^ebgbl_ev guc dZ[_ev

- lha\hey_l jZaf_klblv rIZl gmx beb ^jm]mx Zgl_ggm k
jZat_fhf \ m^h[ghf f_kl_ k emqrbf mjh\g_f kb]gZeZ



Области применения

ljhfure_ggu_
oh^bevgb

We_dljh
]_g_jZlhju

Dhfij_kkhjgu
klZgpbb

Wg_j]_lbdZ

<h^h
ih^]h\h\dZ

lh^\b`gu_
h[t_dlu

GZkhkgu_
klZgpbb

J_a_j\gh_
we_dljhiblZg

ljhfure_ggZy
Z\lhfZlbaZpb

:\lhfZlbaZpb
a^Zgbc