



Uživatelské
SETKÁNÍ
BECKMAN COULTER
LEDNICE 2005

Remisol 2000 na OKB Nemocnice Znojmo

aneb
„data manager“ v praxi

Zdeněk Veškrna, OKB OnsP Znojmo

Co je Remisol2000

Remisol 2000 Data Manager sbírá a spravuje data až pro 3 přístroje Beckman Coulter.

Dvě krajní možnosti použití:

- prostý komunikační protokol (1 místo 3)
- uvolňování pouze validovaných výsledků

Lze použít jako (záloha) LIS.

Remisol versus LIS

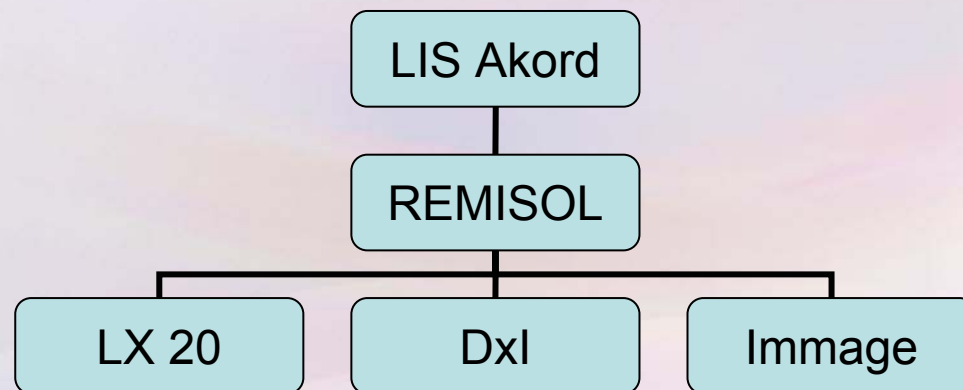
- variabilní druhy přenosu jednotlivých vyšetření (dynamic download, query)
- přehled o aktuální (poslední) lokalizaci zkumavky a došlých výsledcích
- editace varovných hlášení na obrazovce
- kontrola kvality (Westgard, hlášení)
- zobrazení grafů (kap. elfo, hematologie)
- automatická validace výsledků



Další možnosti Remisolu

- reflexní testování
- opakování stanovení (rerun)
- jednoduchá tvorba pravidel (rules) – kombinace podmínek a akcí
- delta check (spojení s rules)
- tisk čárových kódů
- tisk a archivace výsledků

Remisol na OKB Nemocnice Znojmo

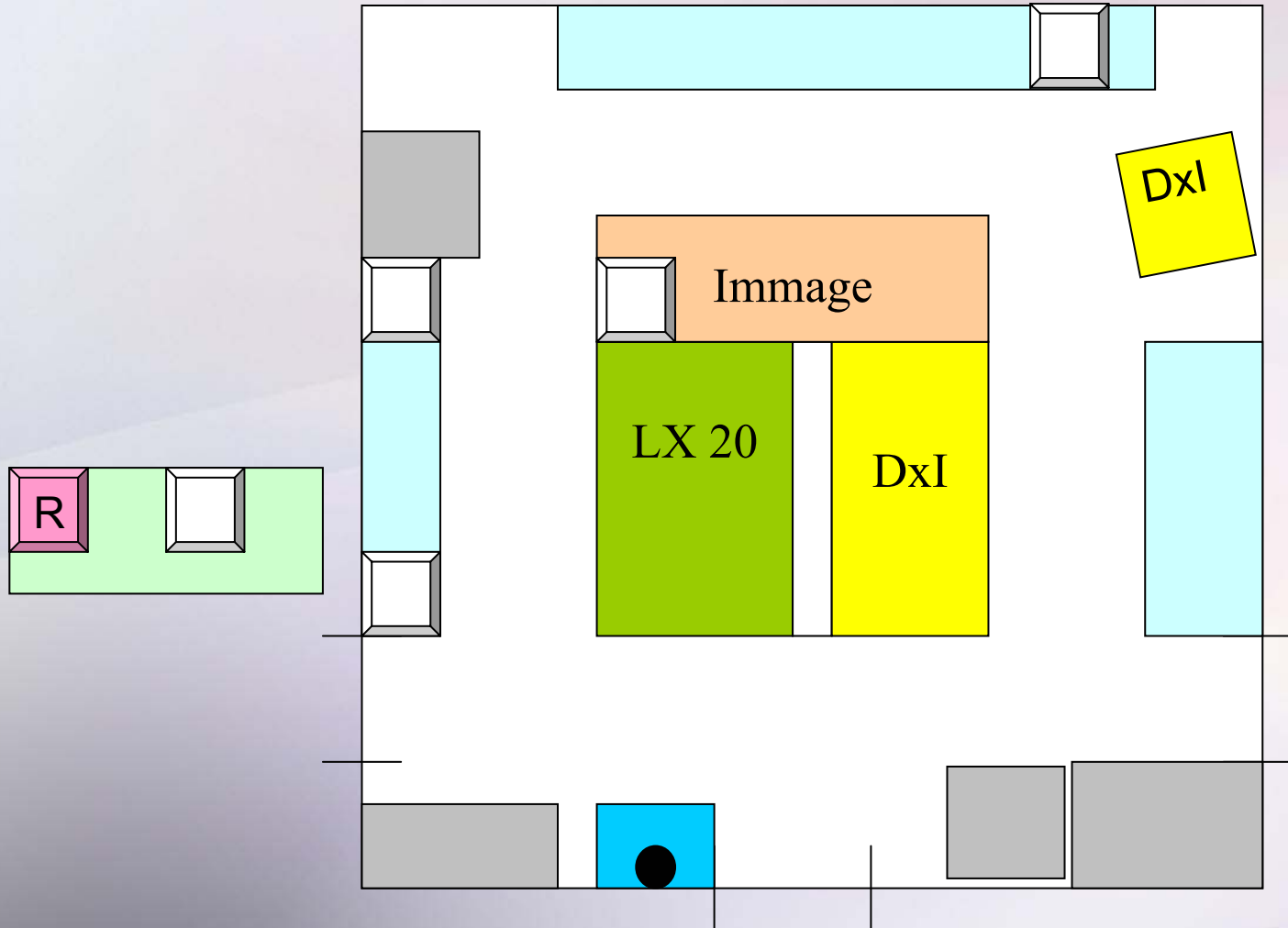


- jedno připojení k LIS pomocí ASTM protokolu
- snadné připojení přístroje uživatelem
- firemní komunikační protokoly umožňují přenos maxima informací

Laboratoř



Uživatelské
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Communication Event Log

15:07:36 Request (PONKOVA RUZENA) Archived
 15:07:36 Request (FOJTIK JOSEF) Archived
 15:07:36 Request (ZYONKOVA KYETOSLAYA) Archived
 15:07:36 Request (HOMOLKA BOHUSLAY) Archived
 15:07:36 Request (CECH FRANTISEK) Archived
 15:07:36 Request (SEBELA FRANTISEK) Archived
 15:07:36 Request (BARTOVICOVA ANTONIE) Archived
 15:07:37 Request (KONYALINKA JOSEF) Archived
 15:07:37 Request (SUTEROVA MARIE) Archived
 15:07:37 Request (SUROYCOVA MARIE) Archived
 15:08:17 Dxl : EY#016: Receiving result tube : 0003213103
 15:08:19 EY#046: Uploading to host : 60/1 0003213103
 15:09:11 Dxl : Sample 0003823003 : LEX;PEX
 15:09:11 Dxl : EY#016: Receiving result tube : 0003823003
 15:09:13 EY#046: Uploading to host : 51/3 0003823003

Erase

Messages generated by rules

```
R 0002623103 12/02 iktericky material
R 0000583103 13/01 mirna hemolyza
R 0000543103 12/01 mirna hemolyza
_ 0000513103 07/03 (TnI):hlasit vysokou hodnotu
R 0001803103 09/03 mirna hemolyza
_ 0001583103 57/01 chylozni material
R 0000103103 13/01 hemolyza [+]
R 0000083103 12/03 hemolyza [+]
R 0003933003 402/01 chylozni material
R 0003923003 401/01 chylozni material
R 0003032503 12/01 mirna hemolyza
R 0003012503 15/03 mirna hemolyza
R 0003002503 15/02 hemolyza [+]
R 0002962503 11/02 mirna hemolyza
R 406/02 iktericky material
R 0001662403 36/02 iktericky material
```

Samples list

| Flags | Sample Id | Position | Instrument | Last name |
|--------|------------|----------|------------|-----------|
| █ -R-- | | 402/2 | LX20 | Unknown |
| █ -R-- | | 405/1 | LX20 | Unknown |
| █ -R-- | | 402/3 | LX20 | Unknown |
| █ -R-- | | 404/2 | LX20 | Unknown |
| █ -R-- | | 406/1 | LX20 | Unknown |
| █ -R-- | | 406/2 | LX20 | Unknown |
| █ -R-- | | 401/2 | LX20 | Unknown |
| █ ---- | 0000013103 | 1/1 | LX20 | Unknown |
| █ TR-- | 0000022803 | 11/2 | LX20 | CERNA |
| █ -R-- | 0000023103 | 11/1 | LX20 | Unknown |
| █ -R-- | 0000032703 | 201/3 | DxI | BARTAKOVA |
| █ TR-- | 0000032803 | 11/3 | LX20 | VOLOSIN |
| █ -R-- | 0000033103 | 11/2 | LX20 | Unknown |
| █ -R-- | 0000042803 | 11/4 | LX20 | BAUER |
| █ -R-- | 0000043103 | 11/3 | LX20 | Unknown |
| █ -R-- | 0000052803 | 12/1 | LX20 | BINKO |
| █ -R-- | 0000053103 | 11/4 | LX20 | Unknown |
| █ -R-- | 0000062803 | 12/2 | LX20 | SEBELA |
| █ ---- | 0000063103 | 12/1 | LX20 | Unknown |
| █ -R-- | 0000072803 | 12/3 | LX20 | CUJDIK |
| █ -R-- | 0000073103 | 12/2 | LX20 | Unknown |
| █ -R-- | 0000083103 | 12/3 | LX20 | Unknown |
| █ ---- | 0000092803 | 13/1 | LX20 | MORAVKOVA |
| █ -R-- | 0000093103 | 12/4 | LX20 | Unknown |
| █ ---- | 0000102803 | 13/2 | LX20 | Moziesiko |
| █ -R-- | 0000103103 | 13/1 | LX20 | Unknown |
| █ -R-- | 0000112803 | 13/3 | LX20 | MUSILOVA |
| █ -R-- | 0000113103 | 13/2 | LX20 | Unknown |
| █ -R-- | 0000123103 | 13/3 | LX20 | Unknown |
| █ -R-- | 0000132803 | 11/1 | LX20 | TAFLIROVA |
| █ -R-- | 0000133103 | 13/4 | LX20 | Unknown |
| █ -R-- | 0000142803 | 11/2 | LX20 | KOCHOVA |
| █ -R-- | 0000143103 | 14/1 | LX20 | Unknown |
| █ -R-- | 0000152803 | 11/3 | LX20 | KRCALOVA |
| █ -R-- | 0000153103 | 14/2 | LX20 | Unknown |
| █ -R-- | 0000162803 | 12/1 | LX20 | KABELAK |
| █ -R-- | 0000163103 | 14/3 | LX20 | Unknown |
| █ -R-- | 0000172803 | 12/2 | LX20 | FIKSA |
| █ -R-- | 0000173103 | 14/4 | LX20 | Unknown |

| | | | | | |
|------|------------|-------|-------|-------------|---|
| TR-- | 0003383103 | 15/1 | LX20 | ZAMECNIKOVA | A |
| TR-- | 0003393103 | 15/2 | LX20 | TUNKOVA | I |
| TR-- | 0003403103 | 2/7 | IMAGE | JURMANOVA | F |
| TR-- | 0003413103 | 405/1 | LX20 | BUBOVA | M |
| TR-- | 0003423103 | 12/1 | LX20 | KREPELA | E |
| TR-- | 0003433103 | 403/3 | LX20 | CECHOVA | A |
| T--- | 0003463103 | 12/2 | LX20 | HAVLICEK | A |
| TR-- | 0003473103 | 12/3 | LX20 | TOULOVA | F |
| -R-- | 0003483103 | 11/1 | LX20 | NEMETH | S |
| TR-- | 0003493103 | 12/4 | LX20 | CECH | M |
| ---- | 0003533103 | / | | KAMENIKOVA | M |
| ---- | 0003543103 | / | | MARTINKOVA | M |
| ---- | 0003553103 | / | | HAVRANKOVA | A |
| ---- | 0003563103 | / | | RAKOWITZOVA | E |
| ---- | 0003573103 | / | | KONVALIN... | A |
| T--- | 0003583103 | / | LX20 | HLUSKOVA | K |
| TR-- | 0003603103 | 14/1 | LX20 | CHOLEVA | I |
| TR-- | 0003613103 | 14/1 | DxI | BUDINSKA | F |
| -R-- | 0003633103 | 402/3 | LX20 | Jatiova | T |
| TR-- | 0003653103 | 14/1 | LX20 | CECH | M |
| TR-- | 0003663103 | 14/2 | LX20 | TOULOVA | E |
| -R-- | 0003673003 | 401/1 | LX20 | DOHNAL | M |
| TR-- | 0003673103 | 14/3 | LX20 | NEMETH | S |
| -R-- | 0003943003 | 11/1 | LX20 | Unknown | |
| T--- | 0007290104 | / | LX20 | RUZICKA | Z |
| TR-- | 0007300104 | 19/1 | LX20 | PROKOPOVA | I |
| ---- | 1000803103 | / | | SVEDOVA | F |
| TR-- | 1001040104 | 31/1 | LX20 | HLAVAC | J |

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```
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```

| | ACCESS | IMMAGE | LX20 | | | |
|----------|--------|--------|------|--|--|--|
| THE | 2 | 9 | 9 | | | |
| FERITIN | 2 | 9 | 9 | | | |
| B12 | 2 | 9 | 9 | | | |
| Folaty | 2 | 9 | 9 | | | |
| PSA | 2 | 9 | 9 | | | |
| FPSA | 9 | 9 | 9 | | | |
| IndexPSA | 9 | 9 | 9 | | | |
| IgE | 2 | 9 | 9 | | | |
| CREm_S | 9 | 9 | 2 | | | |
| BUNm_S | 9 | 9 | 2 | | | |
| URIC_S | 9 | 9 | 2 | | | |
| GLUCm_S | 9 | 9 | 2 | | | |
| TPm_S | 9 | 9 | 2 | | | |

Parameter rules



Test:

Name:

Hemol

IF (HEMOL >= 2) OR (HEMOL Contains 'DH')

THEN RESULT('n8')

ELSE

The rule is active

Play once

Condition

Reverse the condition

◆ And ◆ Or

Add

Actions

◆ Then ◆ Else

Add

Ok

Cancel

Windows: [Icons] Results: [Icons] [Navigation Icons] [Help Icon]

/2005 09:41:53 [Redacted] A 2.51

BIOLX1 (HBD) 31/03/2005 11:47:52 - 03/03/2005 09:41:53

| | -4SD | -3SD | -2SD | -1SD | M | +1SD | +2SD | +3SD | +4SD |
|----------------|------|------|------|------|-------|--------|------|------|--------|
| /2005 11:47:52 | | | | | | | | | A 2.41 |
| /2005 10:48:05 | | | | | [Red] | | | | A 2.45 |
| /2005 10:19:08 | | | | | [Red] | | | | A 2.54 |
| /2005 09:48:42 | | | | | [Red] | | | | A 2.54 |
| /2005 10:23:10 | | | | | [Red] | [Cyan] | | | A 2.64 |
| /2005 10:33:27 | | | | | [Red] | [Cyan] | | | A 2.58 |
| /2005 11:18:30 | | | | | [Red] | [Cyan] | | | A 2.59 |
| /2005 10:38:43 | | | | | [Red] | [Cyan] | | | A 2.63 |
| /2005 12:02:14 | | | | | [Red] | [Cyan] | | | A 2.61 |
| /2005 11:06:49 | | | | | [Red] | [Cyan] | | | A 2.73 |
| /2005 10:12:08 | | | | | [Red] | [Cyan] | | | A 2.65 |
| /2005 11:19:36 | | | | | [Red] | [Cyan] | | | A 2.55 |
| /2005 12:16:32 | | | | | [Red] | [Cyan] | | | A 2.55 |
| /2005 10:37:53 | | | | | [Red] | [Cyan] | | | A 2.47 |
| /2005 10:19:01 | | | | | [Red] | [Cyan] | | | A 2.56 |
| /2005 09:59:28 | | | | | [Red] | [Cyan] | | | A 2.56 |
| /2005 10:11:21 | | | | | [Red] | [Cyan] | | | A 2.45 |
| /2005 10:21:54 | | | | | [Red] | [Cyan] | | | A 2.53 |
| /2005 10:05:35 | | | | | [Red] | [Cyan] | | | A 2.48 |
| /2005 11:47:59 | | | | | [Red] | [Cyan] | | | A 2.51 |
| /2005 10:11:27 | | | | | [Red] | [Cyan] | | | A 2.54 |
| /2005 09:41:53 | | | | | [Red] | [Cyan] | | | A 2.49 |

BIOLX1 (PHOS_m_S) 31/03/2005 11:47:52 - 03/03/2005 09:41:53

| | -4SD | -3SD | -2SD | -1SD | M | +1SD | +2SD | +3SD | +4SD |
|----------------|------|------|------|------|-------|--------|------|------|--------|
| /2005 11:47:52 | | | | | [Red] | | | | A 1.19 |
| /2005 10:48:05 | | | | | [Red] | | | | A 1.21 |
| /2005 10:19:08 | | | | | [Red] | | | | A 1.19 |
| /2005 09:48:42 | | | | | [Red] | | | | A 1.18 |
| /2005 10:23:10 | | | | | [Red] | | | | A 1.20 |
| /2005 10:33:27 | | | | | [Red] | | | | A 1.20 |
| /2005 11:18:30 | | | | | [Red] | | | | A 1.20 |
| /2005 10:38:43 | | | | | [Red] | | | | A 1.18 |
| /2005 12:02:14 | | | | | [Red] | | | | A 1.20 |
| /2005 11:06:49 | | | | | [Red] | [Cyan] | | | A 1.24 |
| /2005 10:12:08 | | | | | [Red] | [Cyan] | | | A 1.20 |
| /2005 11:19:36 | | | | | [Red] | [Cyan] | | | A 1.21 |