CDMS

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Introduction

- Jordan used CLICOM since 1992.
- In 1998 we start to develop our CDMS 1.0 based on Oracle RDBMS.

- Our CDMS data management module can perform a wide variety of tasks:
  - Key-entry of data form old paper.
  - Key-entry of data form current observation.
  - Importing data from different format.
  - Validation and Quality control.
  - Management & re-organization of data sets.
  - Archiving,Exporting,analysis….

- CDMS allows a large number of options putting climate data in useable form.

What You Need?

- Windows NT /2000 Server.
- Workstations WIN95/98/NT/2000
- Local area network (LAN)
- Laser Printer
- Oracle 8 or higher (RDBMS)
- Oracle Tools (Developer 2000).

Database Model Used for Climate Data Storage

- **Our CDMS model is Client Server Oracle-based System**

- **The database model (ERM) Entity Relationship Module**

(*compatible with previous CLICOM database structure)*

CDMS (ERM)

country
- id
- name
- name_local
- met_name
- cnt_met_name_local
- met_est_date
- address
- phone
- fax
- email
- web
- map
- remarks

district
- cnt_id
- id
- name
- remarks

station_type
- code
- des
- remarks

station_work_time
- code
- des

station_obs_period
- code
- des

station_operation
- code
- des

station_hosting
- code
- des

station_info
- id
- local_id
- name
- name_local
- dis_id
- type_m
- wmo_no
- work_time
- obs_period
- open_date
- close_date
- operation
- lat_d
- lat_m
- lat_dir
- long_d
- long_m
- long_dir
- elev
- hosting
- phone
- remarks

unit
- code
- des

element
- id
- name
- name_local
- type
- unit
- remarks

origin
- code
- des

instrument
- id
- name
- name_local
- origin
- manu
- elem
- sys_error
- remarks

ins_man
- code
- des

station_ins
- stn_id
- no
- ins_id
- start_date
- end_date
- hight
- ins_serial_no
- status
- remarks

station_move
- id
- move_no
- reason
- date
- lat_d
- lat_m
- lat_dir
- long_d
- long_m
- long_dir
- elev
- surround
- remarks

monthly_data
- station_id
- element_code
- year
- jan
- feb
- mar
- apr
- may
- jun
- jul
- aug
- sept
- oct
- nov
- dec

station_elem
- id
- ele_id

DLY_DATA
- station_id
- elemenet_code
- year_month_day
- value

dly_elem_ext
- stn_id
- ele_id
- month
- max
- date_max
- min
- date_min

syn_elem_ext
- stn_id
- ele_id
- month
- max_00
- date_max_00
- min_00
- date_min_00
- ....
- .....

master_sonde
- station_id
- year_month
- levels
- time

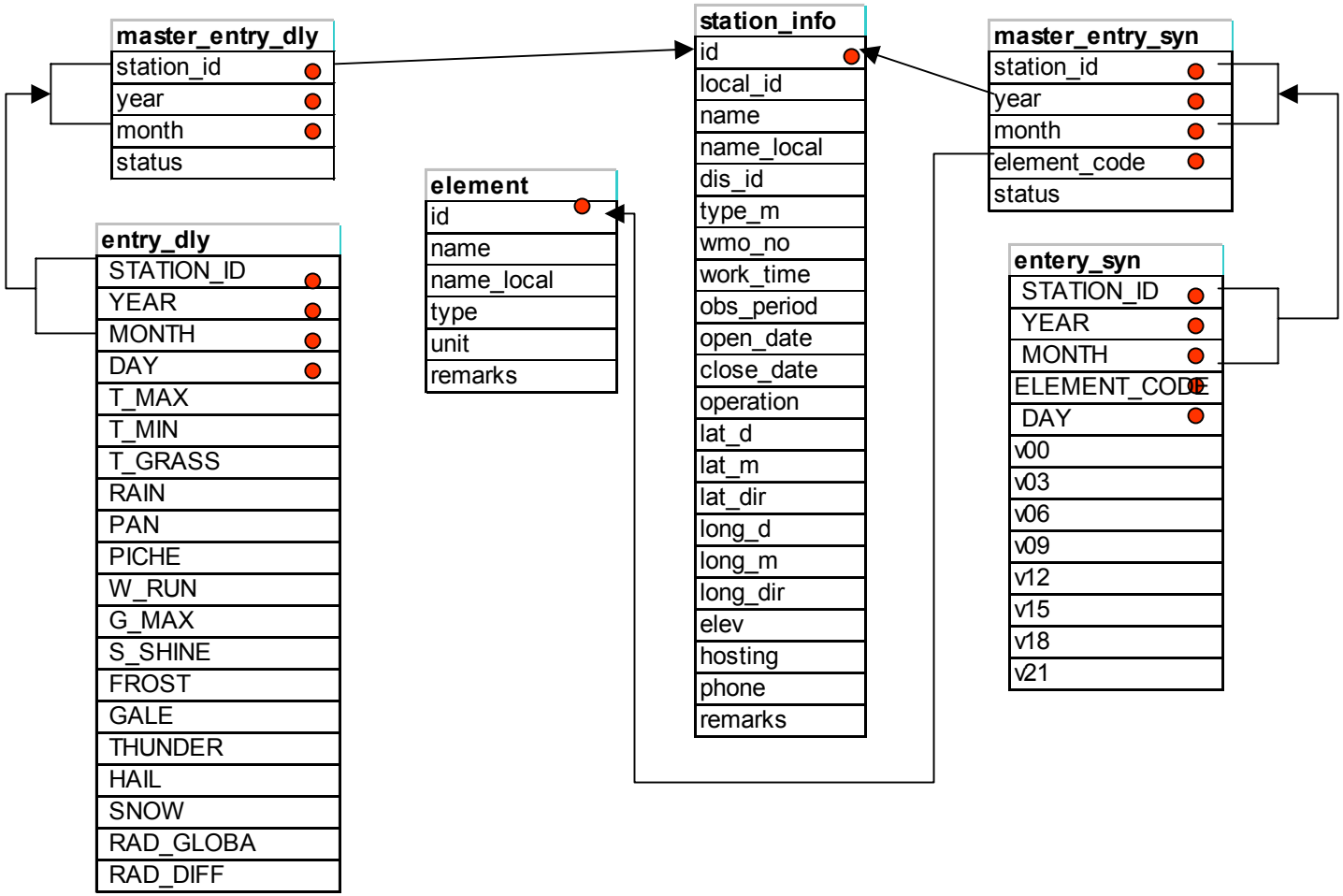
sonde
- station_id
- year_month
- levels
- time
- day
- gpm
- temp
- dew_point
- dew_point_dep
- wind_dir
- wind_speed

synoptic_data
- station_id
- element_code
- year_month_day
- v00
- v03
- v06
- v09
- v12
- v15
- v18
- v21

● Primary Key

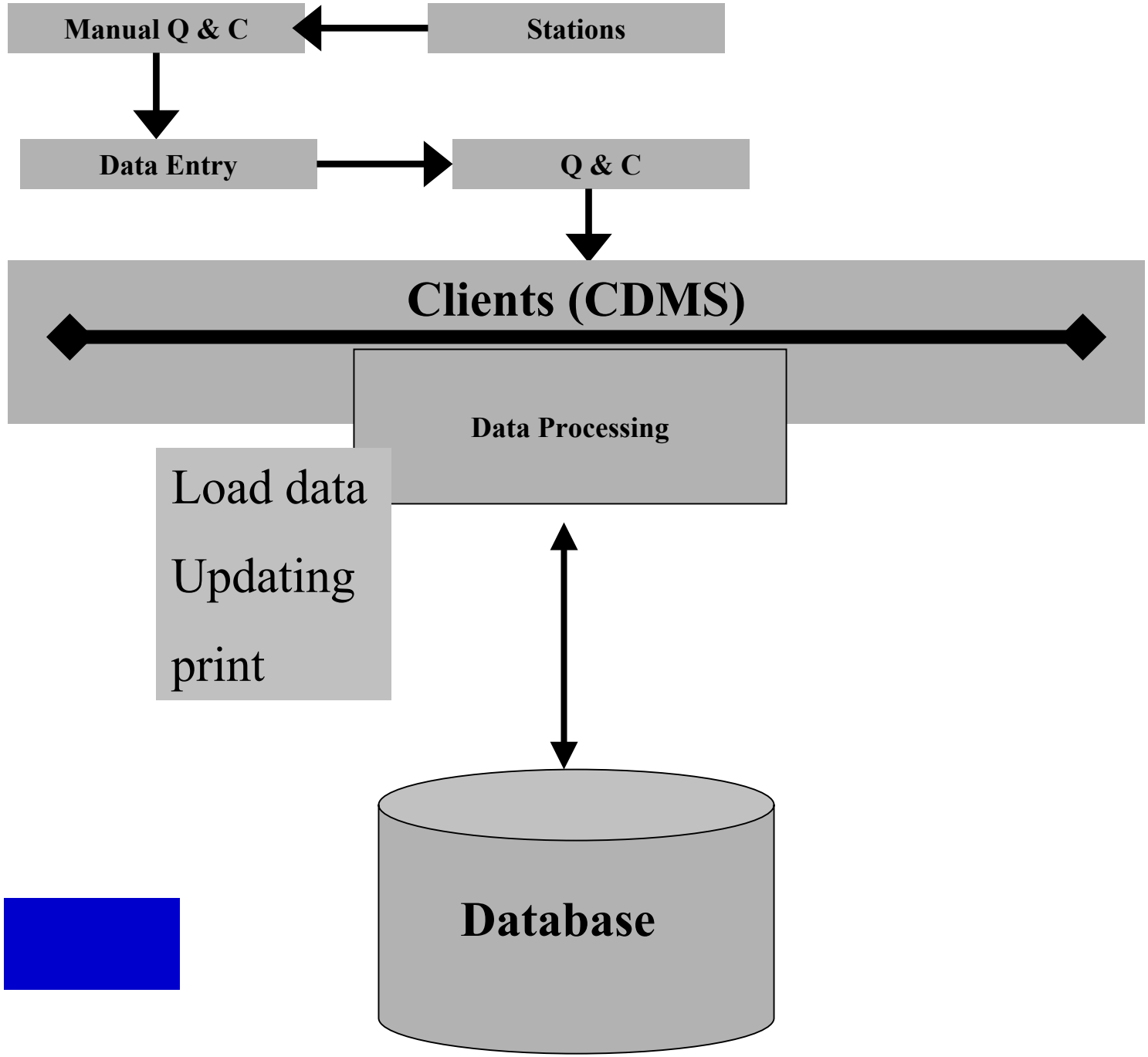
Source Jordan Meteorological department

CDMS (ERM)



Primary Key

Source Jordan Meteorological department


Manual Q & C
Stations
Data Entry
Q & C
Clients (CDMS)
Data Processing
Load data
Updating
print
Database

Coast:

Hardware		Windows NT /2000 Server. 4 WorkstationsWIN95/98/NT/2000 Local area network (LAN)	US$ 16500/20000
Software		**Operating system** **Database system** **License**	
Annual	Licensing Maintenance	 Software Database	US$ 1500 1500

Installation Process:

- Installing Oracle RDBMS on Server NT/2000.
- Installing ORACLE Tools (Developer 2000 v2.1) on Clients.
- Installing CDMS System read (read_me.txt)

- Time Required to perform full Installation (server & 4 Client) of ORACLE RDBMS , Developer & CDMS 6 hrs.

- CDMS Installation 4 Client 2 hrs.

Expertise level to Perform Installation

- Information Technology Knowledge
- Experience in ORACLE RDBMS
- Experience in ORACLE Tools (Developer 2000)
- Experience in Climate Data Management

CDMS Features:

- **user-friendly**
- **Multi User**
- **GUI interface**
- **High storage Capacity**
- **Language support**
- **Privilege wizard**
- **On Line-error messages**
- **Validation & Quality Control**
- **Output products**
- **Direct connect to GIS (arcview)**

Future Plans:

- **Ability to manage station visit and instruments maintenance.**
- **Ingest GTS format (TEMP, SYNOP, METAR ,PILOT & CLIMAT)**
- **Web application.**
- **More products**

CDMS - [CDMS]

Window

USER NAME

ADMIN

PASSWORD

System

Meta Data

Data Entry

Climate Data

Reports

Exit

Jordan Meteorological Department

Climate Division

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