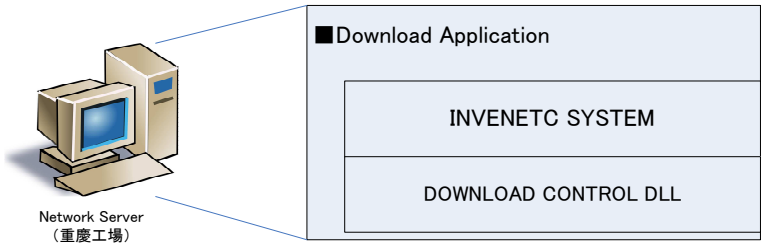
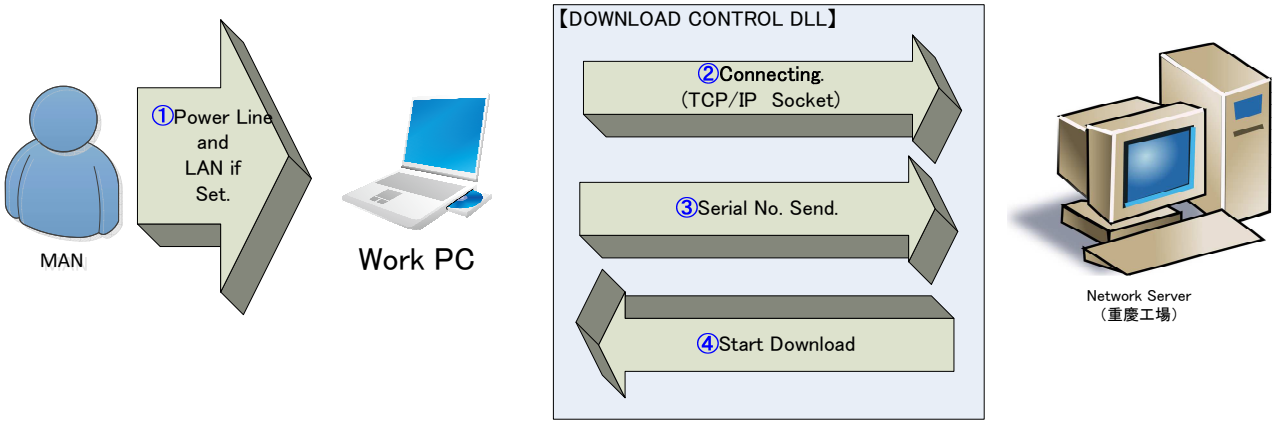
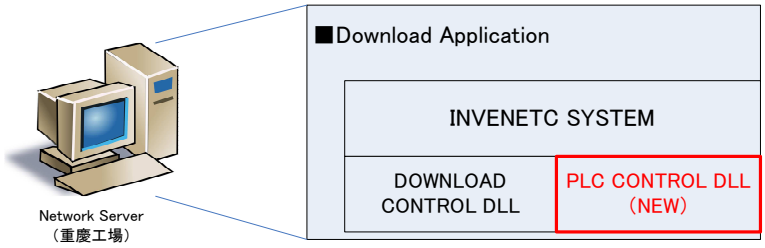
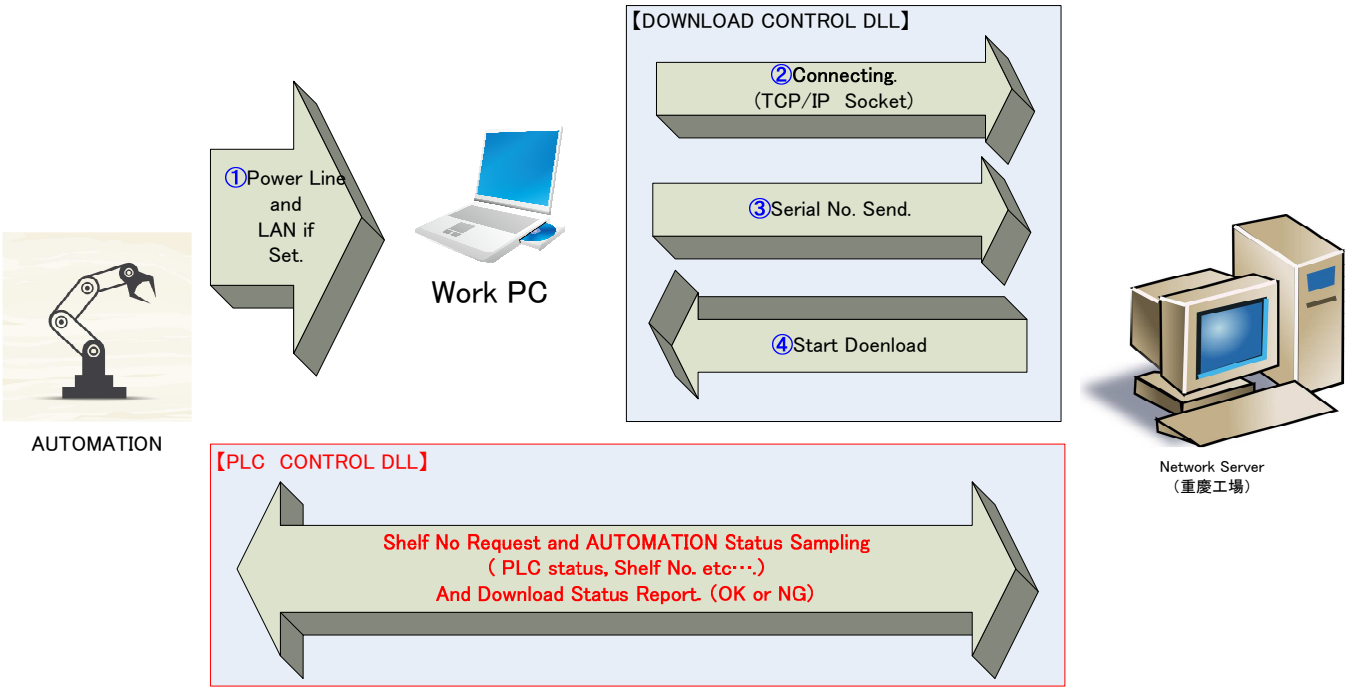
●The present interface of Inventec ???



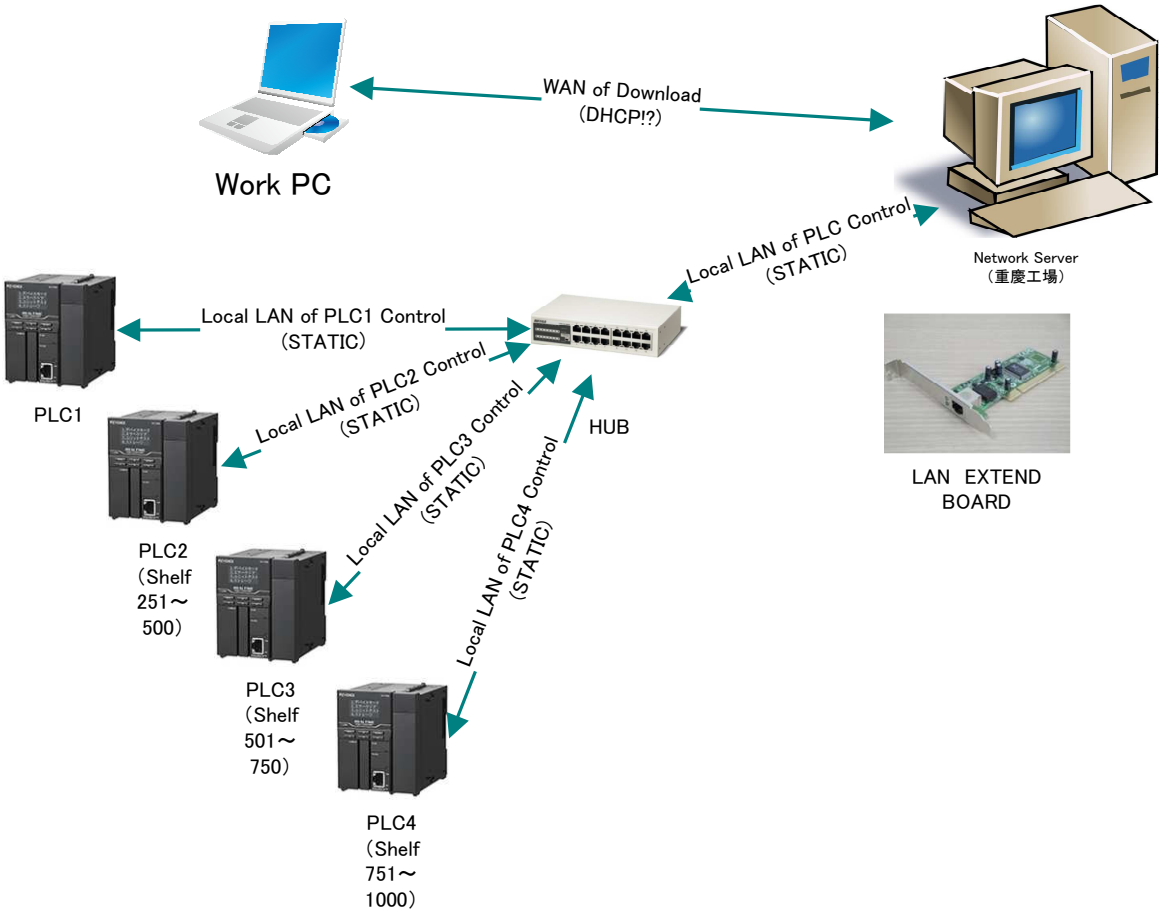


●New interface of Inventec



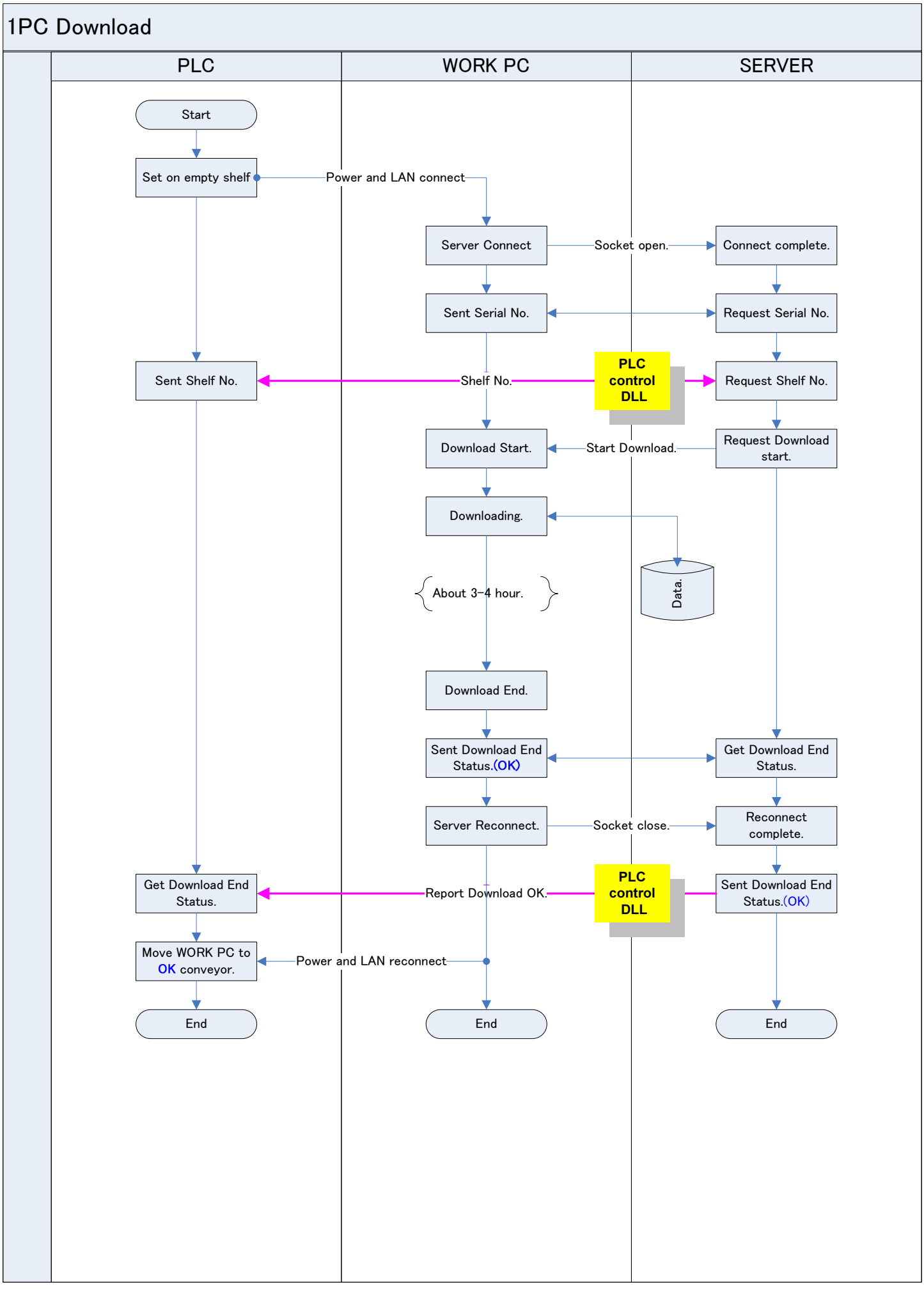


●Detail of interface（LAN）

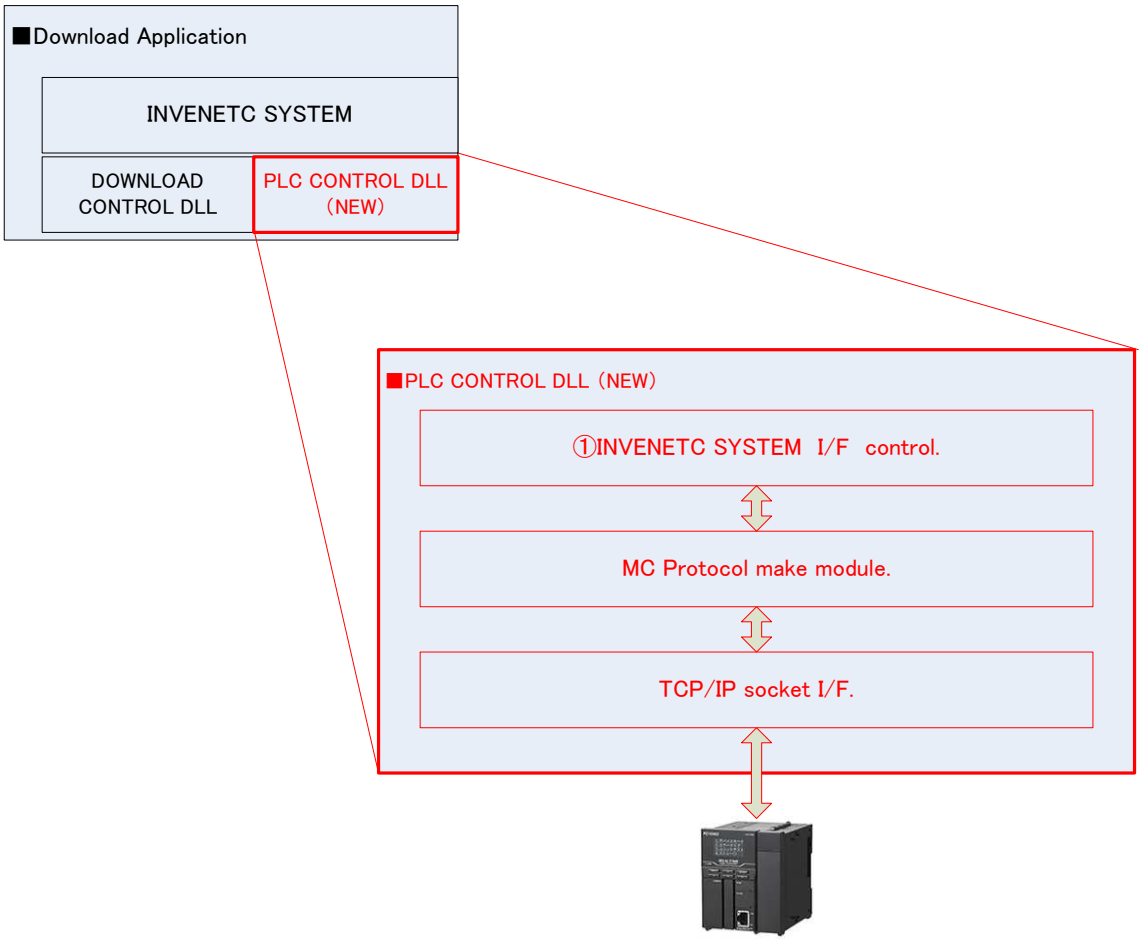


LAN Unit	Shelf	IP Address	NET MASK	Default Getway
Server	—	192.168.0.5	255.255.255.0	192.168.0.1
PLC1	1~250	192.168.0.10		
PLC2	251~500	192.168.0.40		
PLC3	501~750	192.168.0.70		
PLC4	751~1000	192.168.0.100		

●FLOW（1PC Download)



●Structue of INVENTEC system include PLC control DLL（※Updated information）



①INVENTEC SYSTEM I/F control.
- This module controls the interface with the high rank（INVENETC system）.
  - WORD Request_EntryShelfNo（）
  - Request_ExitWork（WORD ShelfNo, WORD Result）
  - Request_All_ShelfStatus（*WORD ShelfStatus）

②MC Protocol make module.
- This module, creates a packet data of MC protocol.
- MC protocol is a packet format for communicating with the PLC.

③TCP/IP I/F socket I/F.
- This controls the socket communication for transmitting MC protocol packet data.

●INVENTEC system and PLC control I/F sample（1／2）

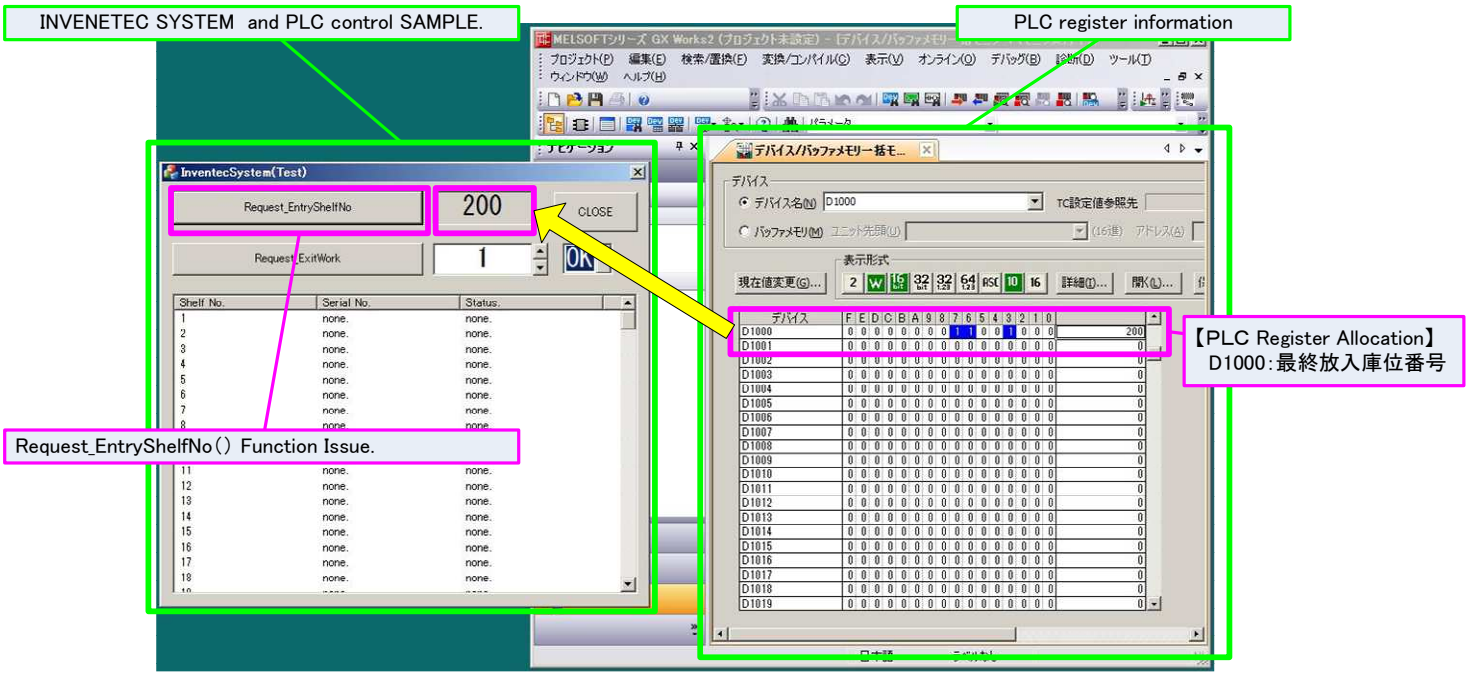
※This is a sample. It is not a guaranteed program.
（這個是Sample。沒有保證的軟件。）

■Sample program configuration.

- Sample program, it was created by VISUAL STUDIO 2012.
- Sample EXE of INVENTEC is, created in MFC program. Sample DLL of PLC CONTROL is, created in VC ++ program.
- Created in WINDOWS 7 64 bit.
- The Automatic machine（PLC）, Mitsubishi Q series. Connected by a LAN
- Automatic machine（PLC）that becomes the target is one.

■WORD Request_EntryShelfNo() Function.

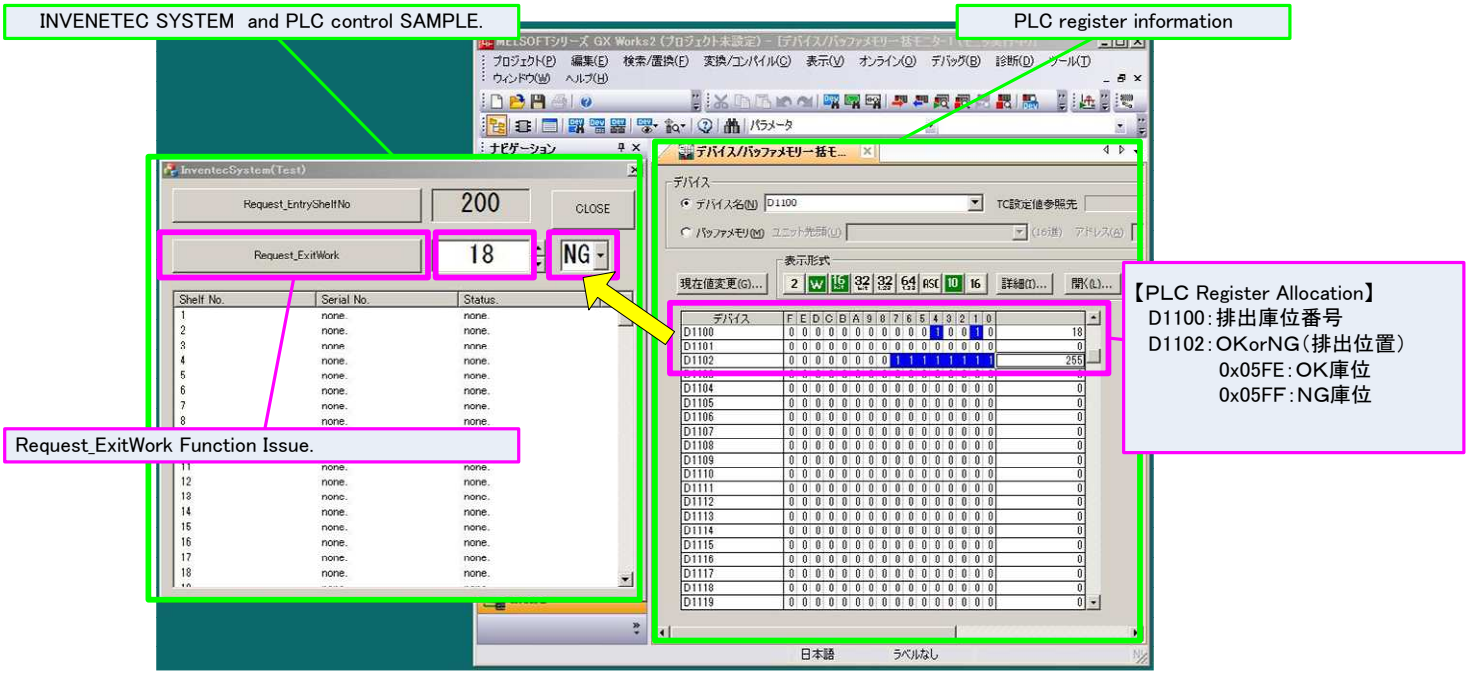
- 這個機能是設備把工件放入時，輸出最近放入的庫位。
- INVENTEC SYSTEM讀取產品的Serial 番號後，使用這個機能取得架子的庫位。
- 如下図的例子，PLC往 Register Address D1000（0003E8）寫入最新的架子庫位，讀取這個信息。

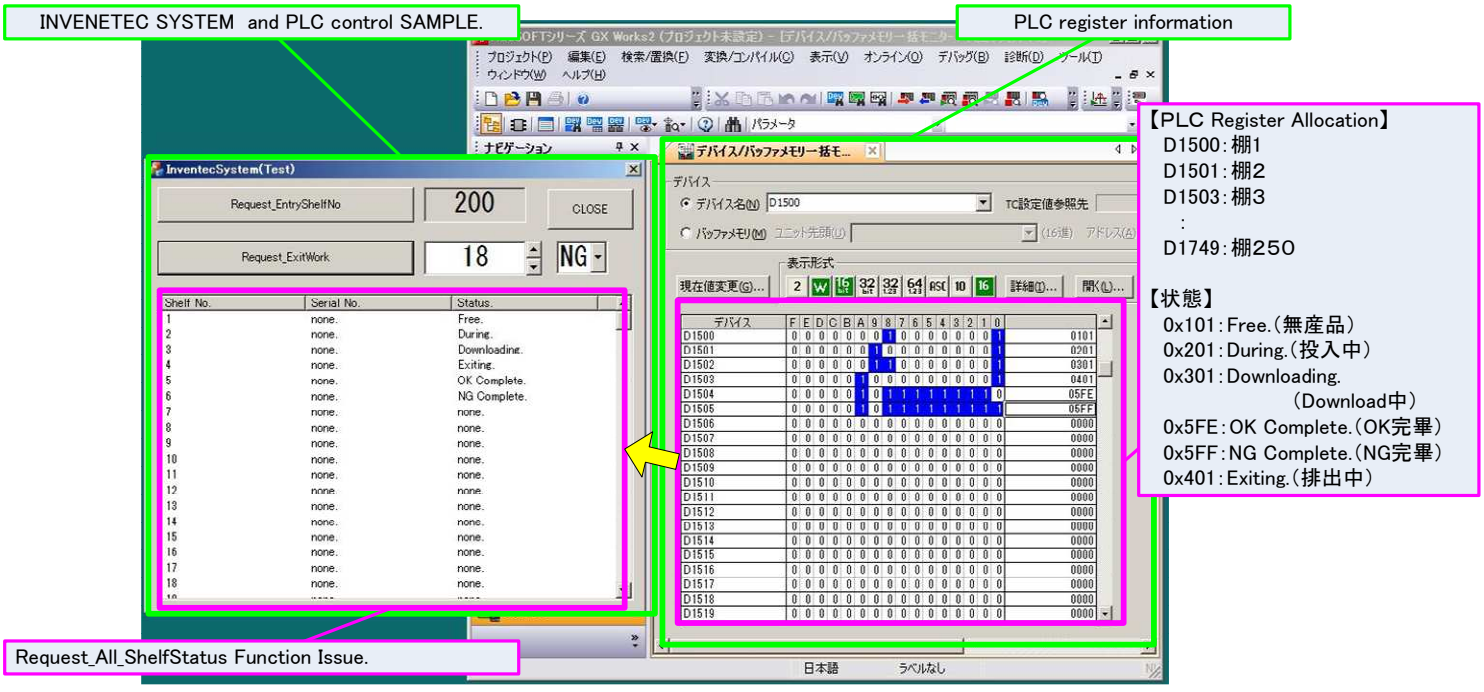


●INVENTEC system and PLC control I/F sample（2／2）

■Request_ExitWork（WORD ShelfNo，WORD Result）Function.

・這個機能是庫位和Download結果輸給設備後，把指定庫位的產品取出放入OK（良品）或NG（不良品）的運送帶。
・INVENTEC SYSTEM 產品Download完成後，使用本機能進行產品的OK（良品）或NG（不良品）排出。
・如下図例子，18號庫位的產品Download由於NG終止，使用本機能向設備要求把18號庫位的NG產品取出。
・往PLC的Register Address D1100（00044C）寫入想排出庫位， 往D1102（00044E）Address寫入OK排出或NG排出，
根據以上的信息設備排出產品。



■Request_All_ShelfStatus（*WORD ShelfStatus）Function.

・這個機能是從設備讀取庫位的狀況，INVENTEC SYSTEM管理時請使用。
・INVENTEC SYSTEM 使用本機能定週期向設備發行，更新INVENTEC SYSTEM內部管理的庫位狀況。
（↑要求的機能）
・如下図例子，INVENTEC SYSTEM內的周期1秒Timer關數，叫起本機能 ， GUI顯示庫位的狀態。
・PLC的Register AddressD1500（0005DC）~D1749（0006D5）的250個庫位狀態
使用GUI顯示狀態以及更改內容。