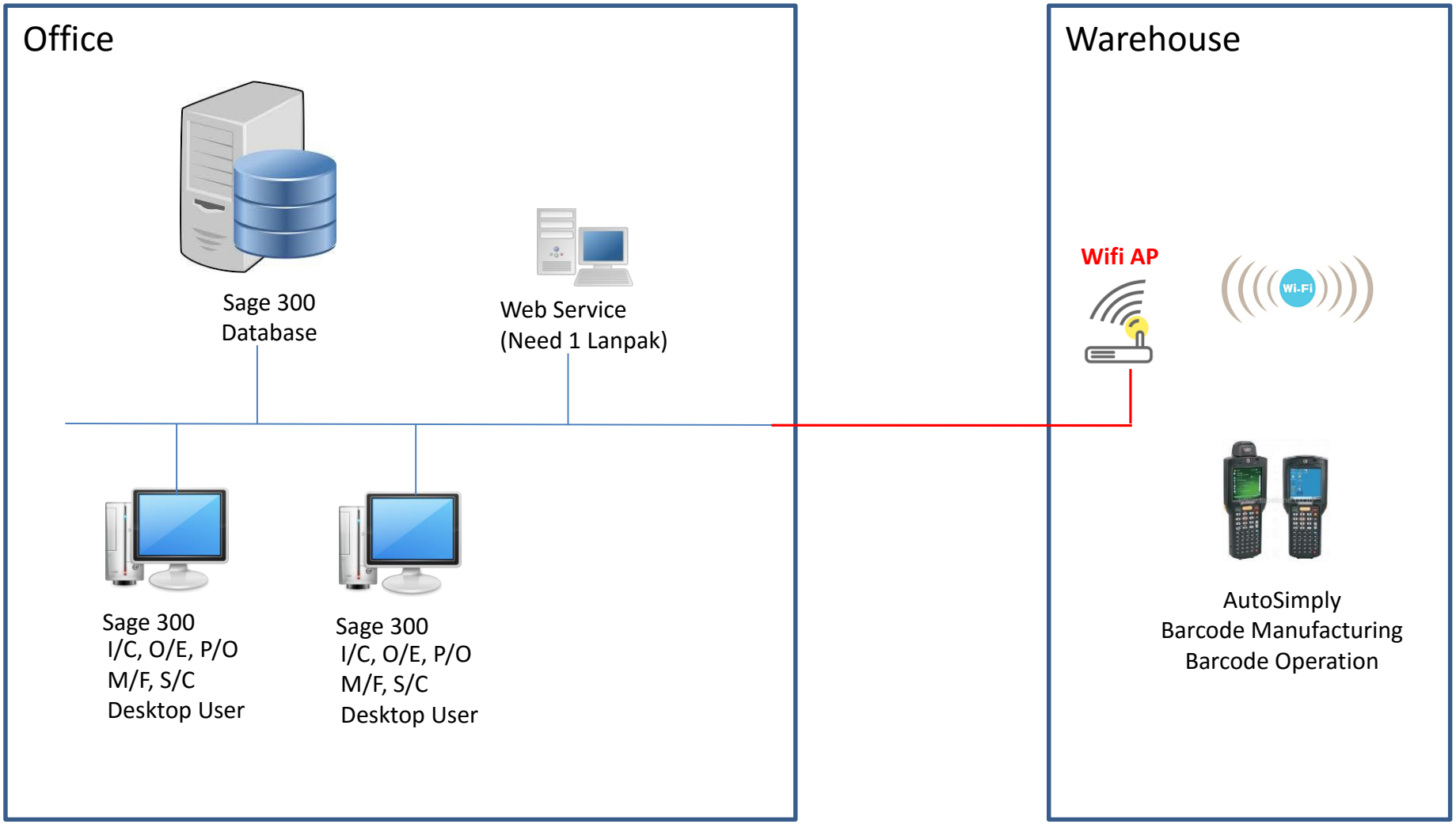
AutoSimply Barcode Network Implementation Scenarios

Case 1



AutoSimply Barcode Network Implementation Scenarios
Case 1

Assumption:

- Sage 300 server located in (single) office.
- Warehouse is in the same building as the office (or adjacent to the office).

Required (new) infrastructure (in red color in the above diagram) to implement barcode modules:

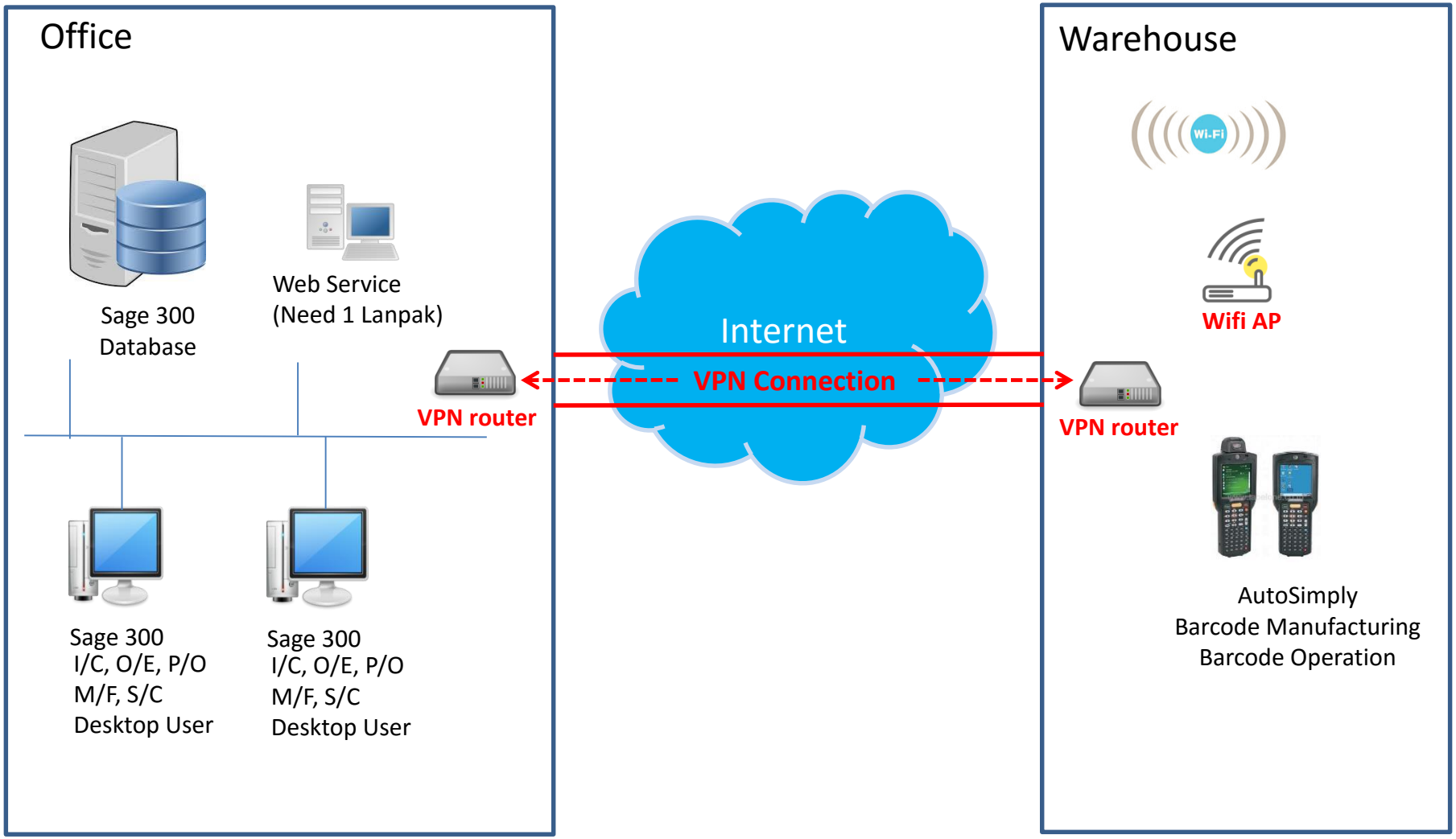
- LAN line / Ethernet switch in warehouse
- WiFi Access Point to be implemented to cover the warehouse (partial coverage just close to the bench to recharge the barcode readers might be ok)

Required set up:

- Set up the WiFi Access Point to broadcast an SSID with WPA2-PSK (or better) security WiFi network signal.
- Connect all barcode readers to the above WiFi network.

AutoSimply Barcode Network Implementation Scenarios

Case 2



AutoSimply Barcode Network Implementation Scenarios
Case 2

Assumption:

- Sage 300 server located in (single) office.
- Warehouse is isolated from office (distance between office and warehouse is more than 100m)
- Currently, there is no Sage 300 workstation (client) in the warehouse (on contrary, if there is already Sage 300 workstation in warehouse, ie. warehouse and office is already connected with VPN, consider it as Case 1)

Required (new) infrastructure (in red color in the above diagram) to implement barcode modules:

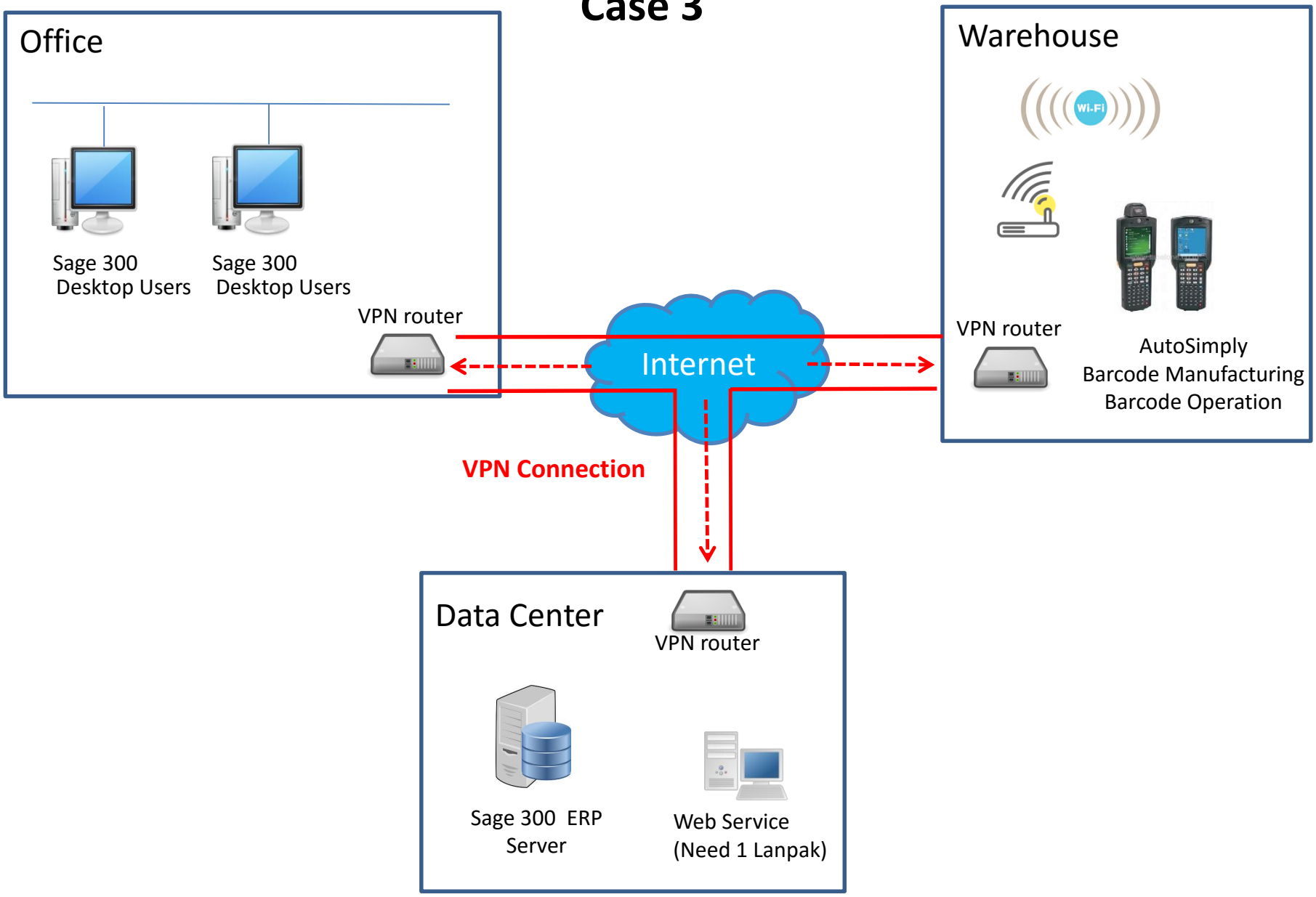
- Internet line with fixed (1) IP address to be installed in office
- Internet router with IPSec VPN capability to be installed in office
- Internet line with fixed (1) IP address to be installed in warehouse
- Internet router with IPSec VPN capability to be installed in warehouse
- WiFi Access Point (can be combined in the same box as the Internet router) to be implemented in warehouse (partial coverage just close to the bench to recharge the barcode readers might be ok).

Required set up:

- Set up the IPSec VPN between the 2 fixed IP addresses in office and warehouse
- Set up the WiFi Access Point to broadcast a SSID with WPA2-PSK (or better) security WiFi signal.
- Connect all barcode readers to the above WiFi network.

AutoSimply Barcode Network Implementation Scenarios

Case 3



AutoSimply Barcode Network Implementation Scenarios
Case 3

Assumption:

- Sage 300 server is located in a data center (hosted environment), not in office (or there are multiple offices)
- Warehouse is isolated from office(s) (distance between office and warehouse is more than 100m).
- Currently, there is no Sage 300 workstation (client) in the warehouse (on contrary, if there is already Sage 300 workstation in warehouse, ie. warehouse and office is already connected with VPN, consider it as Case 1).

Required (new) infrastructure (in red color in the above diagram) to implement barcode modules:

- Internet line with fixed (1) IP address to be installed in warehouse
- Internet router to be installed in warehouse with the same VPN technology capability as the router in use in data center (or should support IPSec VPN)
- WiFi Access Point (can be combined in the same box as the Internet router) to be implemented in warehouse (partial coverage just close to the bench to recharge the barcode readers might be ok).

Required set up:

- Set up the IPSec VPN between the warehouse and the data center
- Set up the WiFi Access Point to broadcast a SSID with WPA2-PSK (or better) security WiFi signal.
- Connect all barcode readers to the above WiFi network

Smart Tips

- 5 barcode readers or below, 512kbps Internet is sufficient, 5-10 barcode readers, 1Mbps Internet is needed
- Both office side and warehouse side Internet bandwidth should be similar in speed
- Prefer Symmetric Upload / Download speed Internet (ie. ADSL is NOT preferable)
- Most IPSec VPN routers require fixed IP address to operate
- IPSec site-to-site VPN (ie. not road warrior) is needed
- For security reason, NAT access (from inside warehouse) to public Internet access should be disabled.
- Business grade IPSec routers (e.g. Cisco, Juniper) should be deployed in both office side and warehouse side
- Business grade WiFi Access Points (e.g. Cisco, Ruckus, Motorola) should be deployed in warehouse. This is especially important if many barcode readers are in use in the same warehouse
- AutoSimply Barcode Module should be installed on the Sage 300 server and Microsoft Web Services (IIS) is needed.

Disclaimer: These recommendations are only for basic network requirements for the barcode system to connect to Sage 300 server only. We did not put any consideration for the whole company security requirement. The VPN connection algorithm depends on your own security requirement. Please consult your network consultants to provide a comprehensive recommendation for your network infrastructure.