

Get local IP address in Delphi

Introducing three different approaches to get local IP address in Delphi: Winsock, TIdStack and TIdIPWatch.

1) Get local IP address by Winsock

```
uses Winsock;

.
.
.

function GetLocalIP: string;
type
  TaPInAddr = array [0..10] of PInAddr;
  PaPInAddr = ^TaPInAddr;
var
  phe: PHostEnt;
  pptr: PaPInAddr;
  Buffer: array [0..63] of Ansichar;
  i: Integer;
  GInitData: TWSADATA;
begin
  WSStartup($101, GInitData);
  Result := '';
  GetHostName(Buffer, SizeOf(Buffer));
  phe := GetHostByName(Buffer);
  if phe = nil then
    Exit;
  pptr := PaPInAddr(phe^.h_addr_list);
  i := 0;
  while pptr[i] <> nil do
    begin
      Result := StrPas(inet_ntoa(pptr[i]^));
      Inc(i);
    end;
  WSACleanup;
end;
```

2) Get local IP address by TIDStack Indy class

```
uses IdStack;

.
.
.

function GetIP : String;
begin
  TIdStack.IncUsage;
  try
    Result := GStack.LocalAddress;
  finally
    TIdStack.DecUsage;
  end;
end
```

3) Get local IP address by TIdIPWatch Indy component

```
uses IdBaseComponent, IdComponent, IdIPWatch;
```

```
.  
.   
.
```

```
function GetLocalIp: string;
```

```
var
```

```
    IPW: TIdIPWatch;
```

```
begin
```

```
    IpW := TIdIPWatch.Create(nil);
```

```
    try
```

```
        if IpW.LocalIP <> '' then
```

```
            Result := IpW.LocalIP;
```

```
        finally
```

```
            IpW.Free;
```

```
        end;
```

```
end;
```