
Article

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DNI functions

Hi everyone!

I want to share four functions with you. I hope that you can use it at some time.

DNI: the initials of the type of national identity document, is composed of different series of numbers and letters. That proves the identity and personal data of the holder, as well as the Spanish nationality. Example: 94494452X

NIE: The NIE or foreigner identity number is a code for foreigners in Spain.

In this page you can generate examples of DNI or NIE <https://generadordni.es/>

The first function calculates the letter of a DNI number.

```
/// Calculate letter of DNI
/// <br><b>pDni</b> format: con 8 numbers
ClassMethod GetLetterDni(pDni As %String) As %String
{
    set correspondence = $LISTBUILD("T", "R", "W", "A", "G", "M", "Y", "F", "P", "D", "X", "B", "N", "J", "Z", "S", "Q", "V", "H", "L", "C", "K", "E")

    set letter = ""

    if (pDni '=? "") & ($GET(pDni)?8N){
        set num = (pDni # 23)+1
        set letter = $LISTGET(correspondence,num)
    }

    quit letter
}
```

The second function calculates a letter of NIE using the first function.

```
/// Calculate letter of NIE
/// <br><b>pNie</b> format: 1 letter, 7 numbers
ClassMethod GetLetterNie(pNie As %String) As %String
{
    set letter = ""
    //Get the first value
    set letter1 = $ZCONVERT($EXTRACT(pNie,1,1), "U")
    //Cogemos el resto del Nie para su posterior uso
    set num = $EXTRACT(pNie,2,8)

    if (pNie '=? "") & ($GET(pNie)?1U7N){

        //If NIE starts with X, the X is replaced by the 0
```

```

if (letter1 = "X") { set dni = 0_num }

//If NIE starts with Y, the Y is replaced by the 1
elseif(letter1 = "Y") { set dni = 1_num }

//If NIE starts with Z, the Z is replaced by the 2
elseif (letter1 = "Z"){ set dni = 2_num }

//Calculates the letter
set letter = ..GetLetterDni(dni)
}

quit letter
}

```

The third function validates a DNI using the first function.

```

/// <br><b>pDni</b> format: 8 numbers, 1 letter
/// <br><b>0</b> Dni OK
/// <br><b>-1</b> Dni error
ClassMethod ValidateDni(pDni As %String) As %Integer
{
    set response = -1

    if (pDni '=? "") & ($GET(pDni)?8N1U){
        //Get the numbers
        set auxNum = $EXTRACT(pDni,1,8)

        //Get the letter
        set auxLetter = $EXTRACT(pDni,9,9)

        //Calculates letter of dni
        set calculatedLetter = ..GetLetterDni(auxNum)

        //If both letters are the same the DNI is valid
        if (auxLetter = calculatedLetter) { set response = 0 }
    }

    quit response
}

```

The last function validates a NIE using the second function.

```

/// <br><b>pNie</b> NIE format: 1 letter, 7 numbers, 1 letter
/// <br><b>0</b> NIE OK
/// <br><b>-1</b> NIE error
ClassMethod ValidateNie(pNie As %String) As %Integer
{
    set response = -1

    if (pNie '=? "") & ($GET(pNie)?1U7N1U){
        //Get the "numbers"
        set auxNum = $EXTRACT(pNie,1,8)

        //Get the first letter
        set auxLetter = $EXTRACT(pNie,9,9)
    }
}

```

```
set calculatedLetter = ..GetLetterNie(auxNum)

//Si ambas letras son iguales el DNI es valido
if (auxLetter = calculatedLetter) { set response = 0 }
}

quit response
}
```

Any comments to improve will be welcome!!!

Regards ;)

#Code Snippet #Tips & Tricks #Caché

Source URL:<https://community.intersystems.com/post/dni-functions>