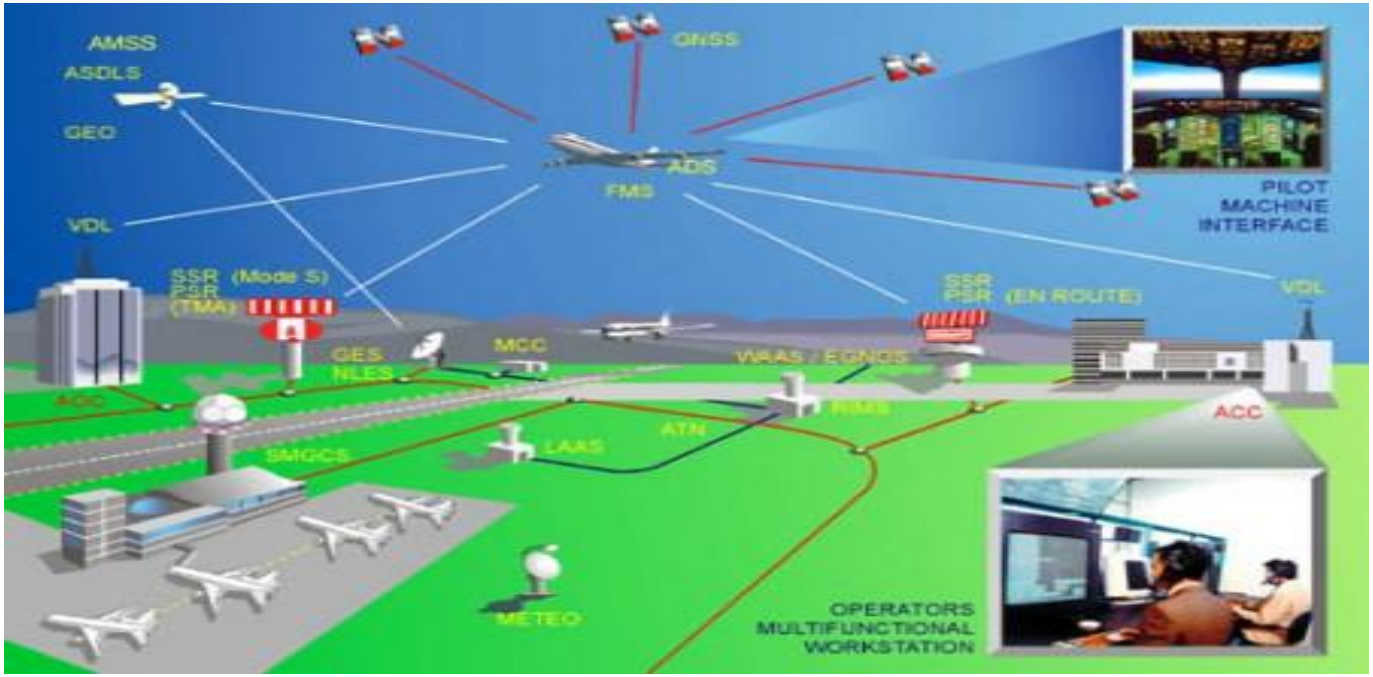
Infraestructura para Transmitir en Formato XML

Presentado por:
Antonio José Espinoza

Septiembre 2015

Telecomunicaciones Aeronáuticas

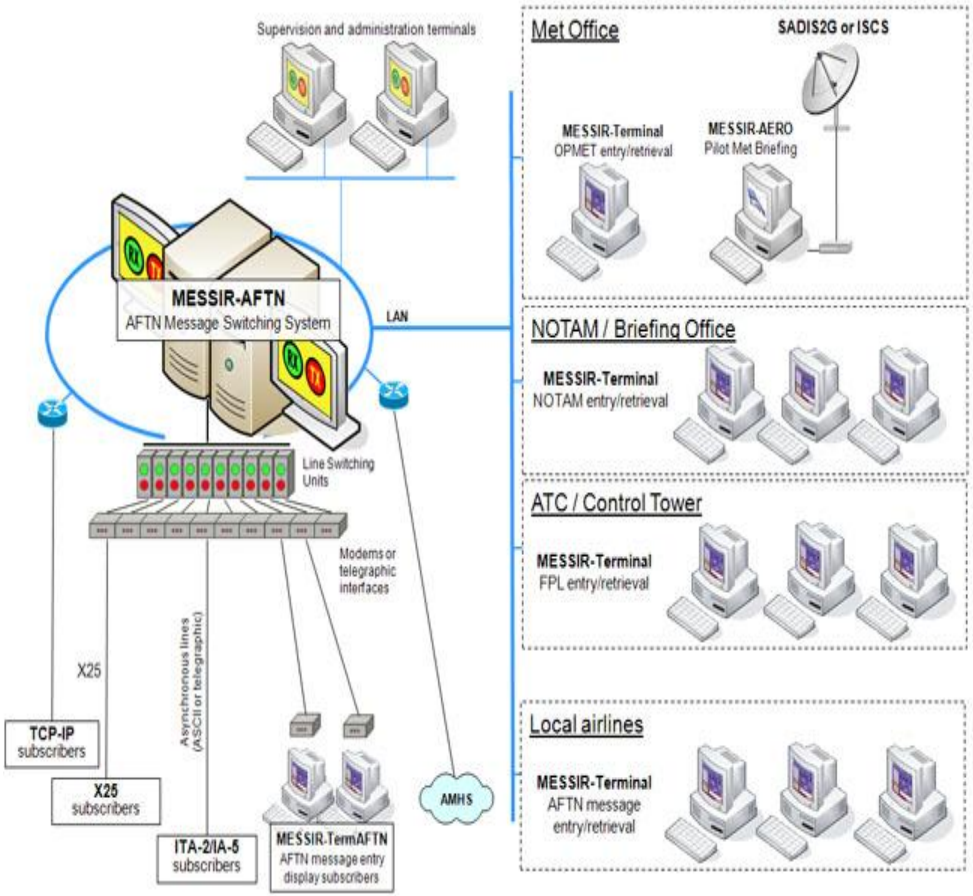


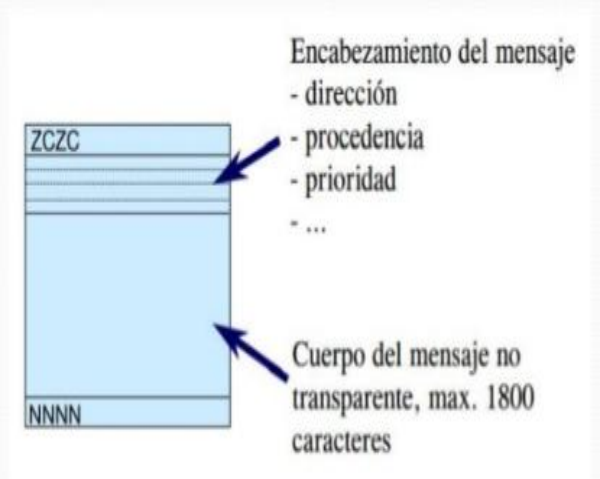
Se utilizan para el intercambio de mensajes relativos a la seguridad y regularidad aeronáutica, control de tránsito aéreo, información meteorológica e información operacional.

Meteorología

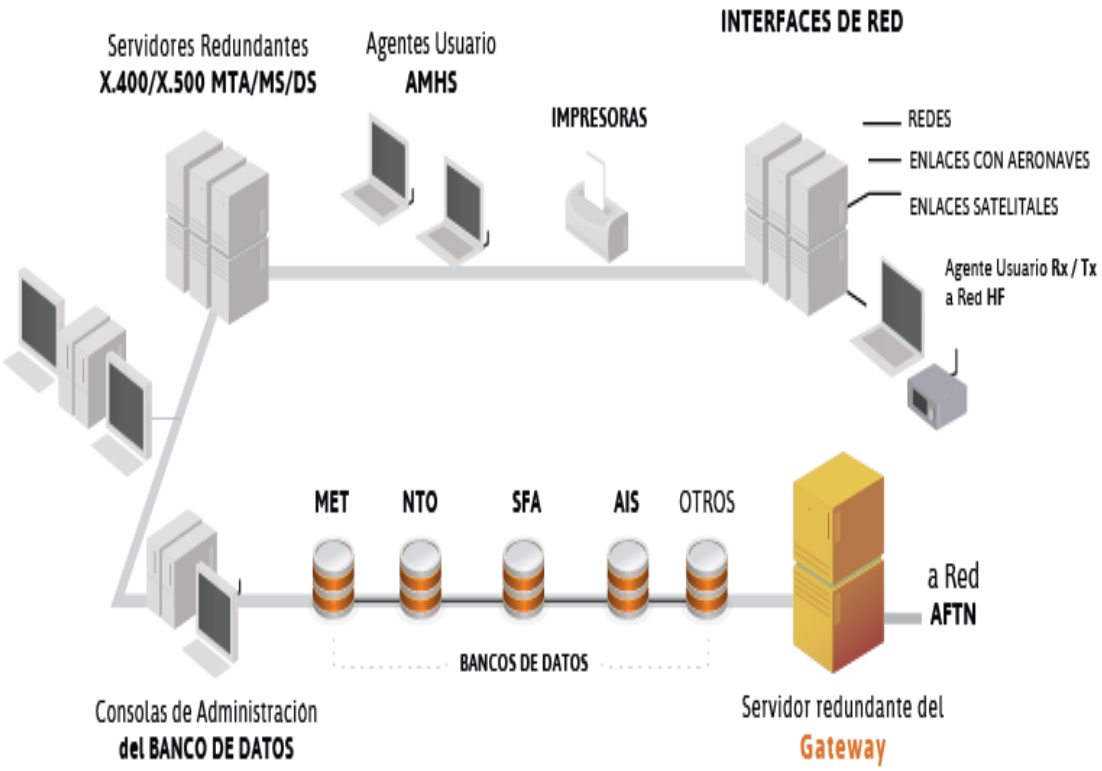
Contribuye a las operaciones aéreas, mediante el suministro confiable y oportuno de reportes de las condiciones meteorológicas, tanto en los aeropuertos como a lo largo de las rutas de navegación aérea.

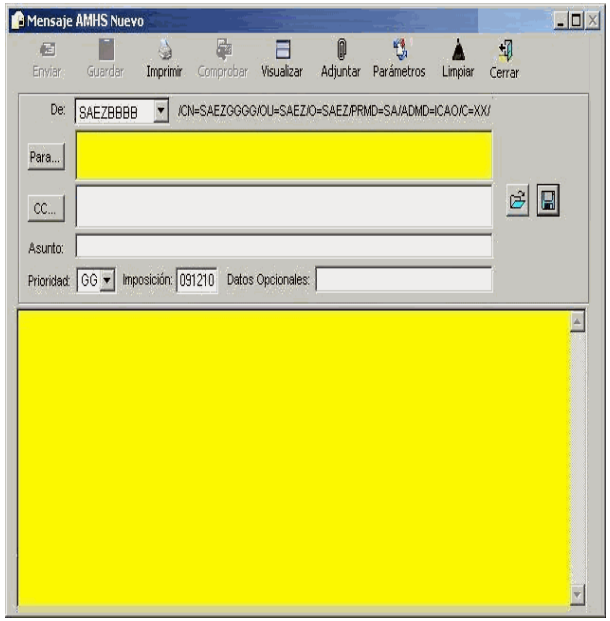
Sistema de Comunicación AFTN



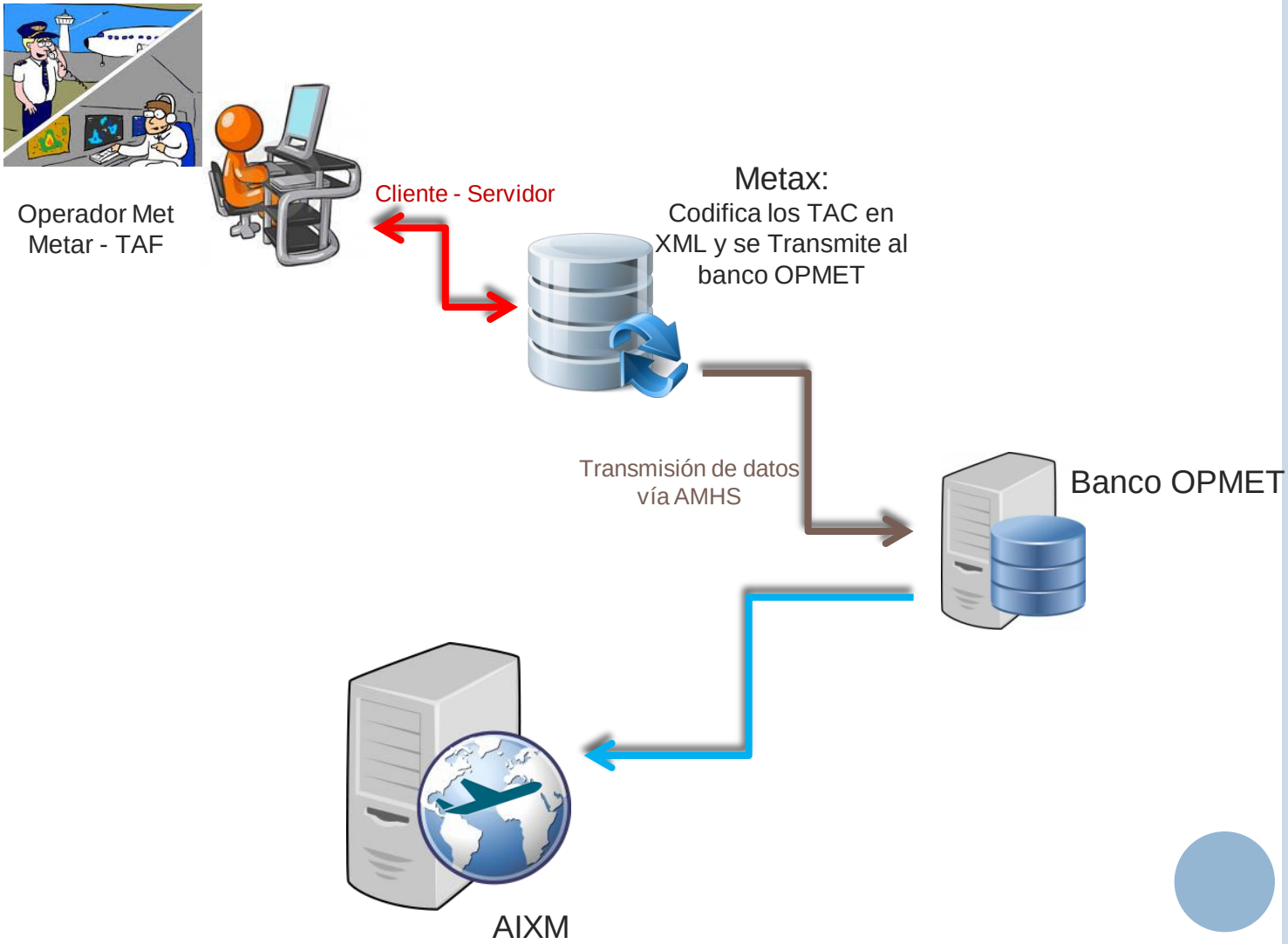


Sistema de Comunicación AMHS



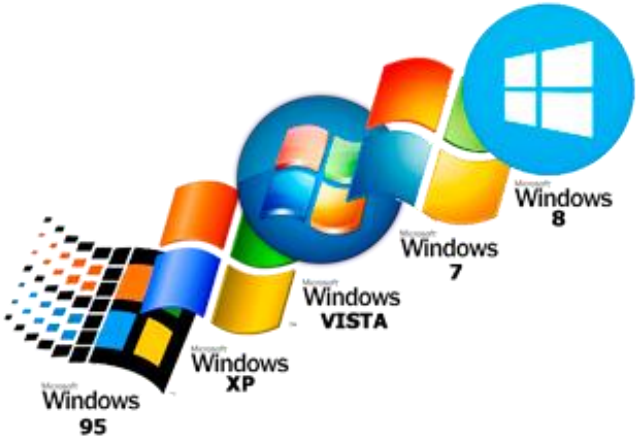


Estructura Metax

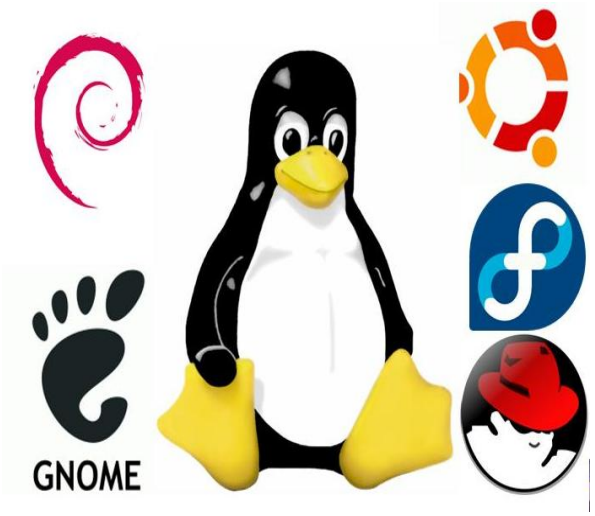


Requisitos Metax

Windows



Linux



Requisitos mínimos del Sistema:

-Procesador: Dual-Core 2.3 GHz
-Ram: 1 Gb
-Disco Duro: 160 Gb
-Video: Tarjeta gráfica con soporte para DirectX 9 y 128MB de memoria
-Explorador: Firefox
-Unidad USB y DVD
-Tarjeta de Red

Funcionamiento Metax

Metar TAC

Ve_SAVN202609201518: Bloc de notas

Archivo Edición Formato Ver Ayuda

```
SAVN20 SVMR 261800
METAR SVCR 261800Z /////KT 9999 FEW016 35/28 Q1009 =
METAR SVMC 261800Z /////KT 9999 FEW016 36/29 Q1010 =
METAR SVBM 261800Z 11015KT 9999 SCT016 32/19 Q1014 =
METAR SVBS 261800Z NIL=
METAR SVMI 261800Z 29007KT 9999 FEW016 34/26 Q1010 =
METAR SVFM 261800Z NIL=
METAR SVBC 261800Z NIL=
METAR SVCU 261800Z NIL=
METAR SVMG 261800Z /////KT 9999 FEW010 34/22 Q1011 =
METAR SVAC 261800Z 11003KT 9999 SCT020 34/26 Q1011 =
METAR SVMT 261800Z NIL=
METAR SVBI 261800Z NIL=
METAR SVCB 261800Z NIL=
METAR SVVA 261800Z 18007KT 9999 BKN016 33/22 Q1013 =
METAR SVSO 261800Z NIL=
```

Metar XML


```
<?xml version="1.0" encoding="UTF-8"?>
- <METAR xsi:schemaLocation="http://icao.int/iwxxm/1.0RC1 http://schemas.wmo.int/iwxxm/1.0RC1/iwxxm.xsd
http://data.wmo.int/def/metce/1.0RC1 http://schemas.wmo.int/metce/1.0RC1/metce.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:sam="http://www.opengis.net/sampling/2.0"
xmlns:gss="http://www.isotc211.org/2005/gsr" xmlns:gts="http://www.isotc211.org/2005/gts"
xmlns:sams="http://www.opengis.net/samplingSpatial/2.0" xmlns:gss="http://www.isotc211.org/2005/gss"
xmlns:metce="http://data.wmo.int/def/metce/1.0RC1" xmlns:om="http://www.opengis.net/om/2.0"
xmlns:gml="http://www.opengis.net/gml/3.2" xmlns:gmd="http://www.isotc211.org/2005/gmd"
xmlns:gco="http://www.isotc211.org/2005/gco" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:iwxxm="http://icao.int/iwxxm/1.0RC1">
  - <iwxxm:METAR automatedStation="false" status="NORMAL" gml:id="metar-SVCR-2015-08-07T11Z">
    - <iwxxm:observation>
      - <om:OM_Observation gml:id="observation-SVCR-2015-08-07T110000Z">
          <om:type xlink:title="MeteorologicalAerodromeObservation"
            xlink:href="http://data.wmo.int/def/observationType/iwxxm/1.0RC1/MeteorologicalAerodromeObservation"/>
        - <om:phenomenonTime>
          - <gml:TimeInstant gml:id="time-instant-20150807110011Z">
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            </gml:TimeInstant>
          </om:phenomenonTime>
          <om:resultTime xlink:href="time-instant-20150807110011Z"/>
        - <om:procedure>
          - <metce:Process gml:id="metar-observation-procedure">
              <metce:documentationRef xlink:title="WMO No. 49 Volume 2 Meteorological Aervice for International Air Navigation"
                xlink:href="http://wis.wmo.int/procedure=MetarOb"/>
            </metce:Process>
          </om:procedure>
          <om:observedProperty xlink:title="Observed properties for METAR and SPECI (Meteorological Aerodrome Reports)"
            xlink:href="http://data.wmo.int/def/observableProperty/metarSpeci/observation"/>
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          - <sams:SF_SpatialSamplingFeature gml:id="sampling-point-SVCR">
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```


AIXM

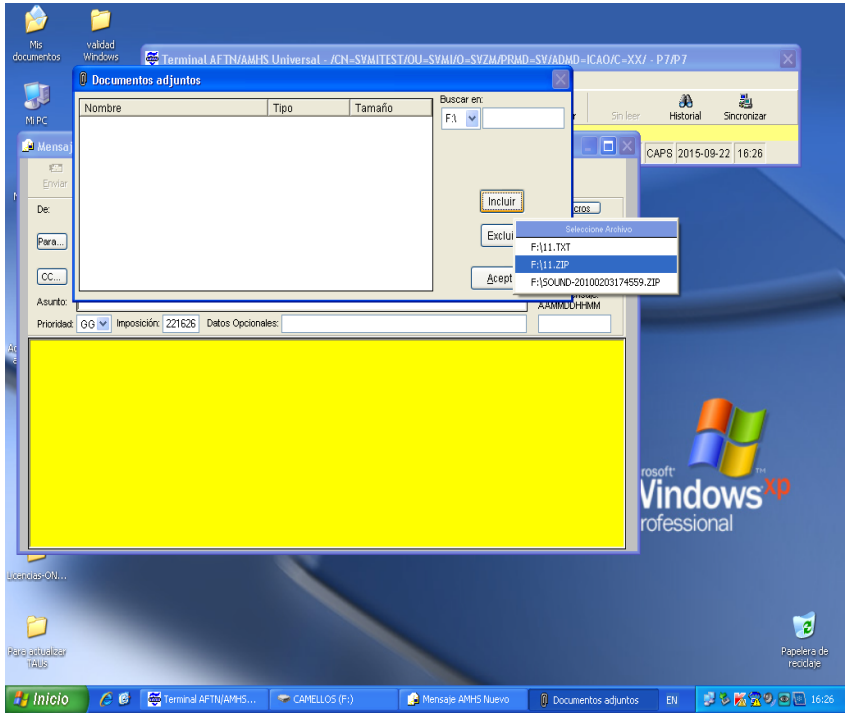
Centro Met Nac.

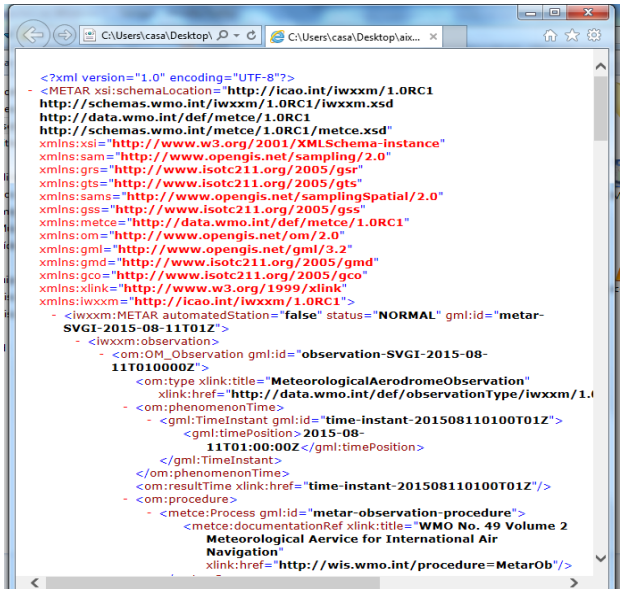
Metax

UTA o TAU
OPMET

Pruebas Metax - AMHS

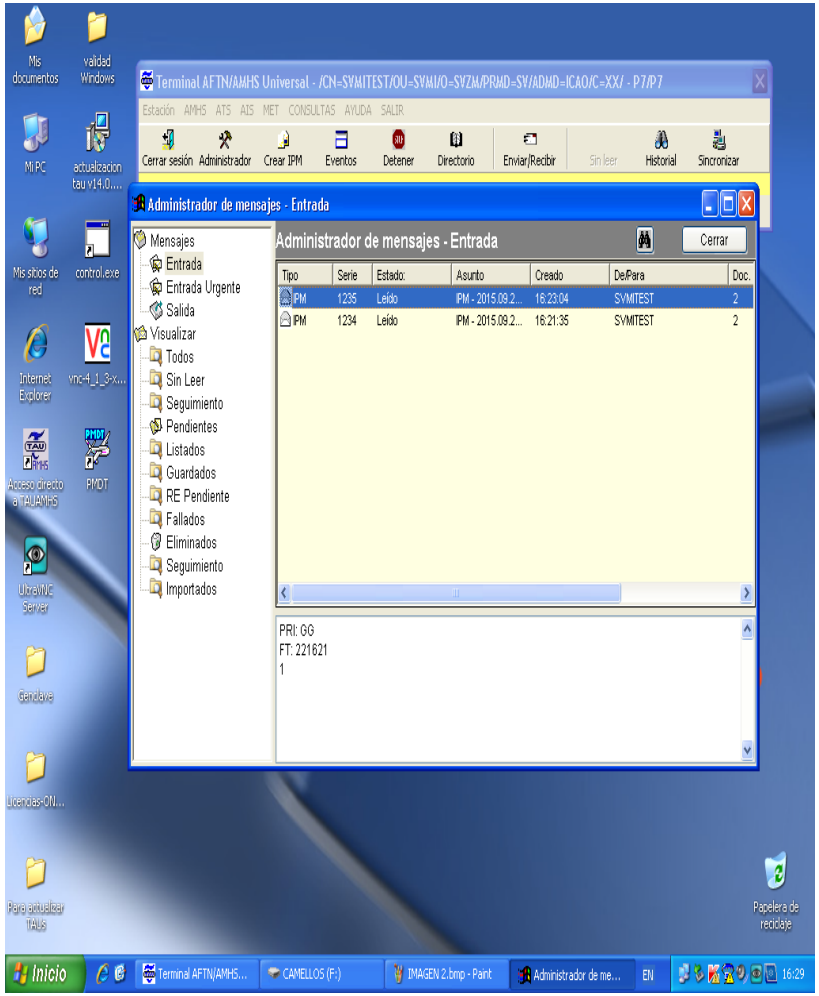
AMHS

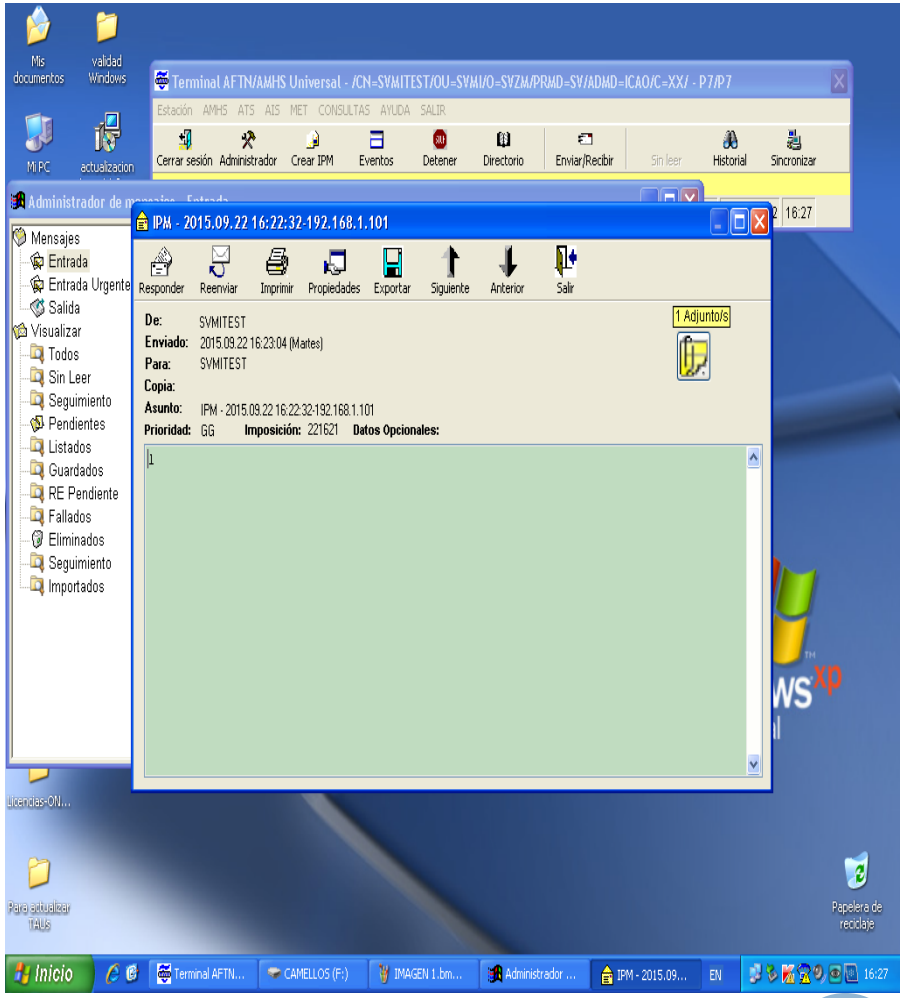




Metar XML

Pruebas Metax - AMHS





Conclusiones Pruebas Metax - AMHS

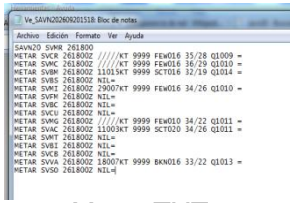
Se adjunto y envió el mensaje sin problemas.

EL mensaje se adjunto desde una memoria extraíble USB debido a la configuración del sistema.

El Software de la terminal esta configurado solo para adjuntar fichero .ZIP y .TXT.

Existe limitante en las terminales AMHS debido a que es un sistema cerrado.

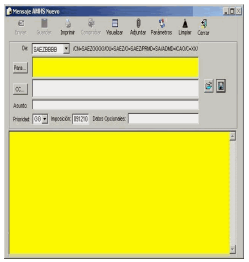
Recomendación Metax - AMHS



Metar TXT

Metar XML

AIXM - OPMET

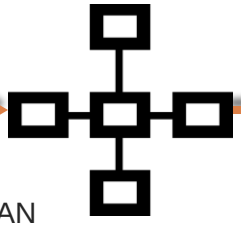


Adj - Cuerpo

Centro de Datos Met.

METAX

Terminal AMHS



Red LAN

Preguntas ??????

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